

TABLE C-15
AVERAGE CONCENTRATION OF CHEMICAL IN FOOD ITEM (mg/kg)

Compound	Average Csoil (mg/kg)	Soil to Earthworm BCF	Earthworm Concentration	Reference	Soil to Arthropod BCF	Arthropod Concentration	Reference	Soil to Plant BAF	Plant/Fruit/Seed Concentration	Reference	Plant to Wildlife BCF	Plant to Deer Mouse Concentration	Reference	Soil to Wildlife BCF	Soil to Deer Mouse Concentration	Reference	TOTAL DEER MOUSE CONCENTRATION	Plant to Bird BCF	Plant to Bird Concentration	Reference	Soil to Bird BCF	Soil to Bird Concentration	Reference	TOTAL BIRD CONCENTRATION
2-Methylnaphthalene	6.98E-02	7.00E-02	4.89E-03 EPA, 1999*		7.00E-02	4.89E-03 EPA, 1999*		2.02E-02	1.41E-03 EPA, 1999*		5.31E-02	7.49E-05 EPA, 1999*		1.27E-04	8.86E-06 EPA, 1999*		8.37E-05	3.11E-02	4.38E-05 EPA, 1999*		9.98E-04	6.97E-05 EPA, 1999*		1.14E-04
4,4-DDD	7.66E-03	1.26E+00	9.65E-03 EPA, 1999		1.26E+00	9.65E-03 EPA, 1999		9.37E-03	1.59E-05 EPA, 1999		2.72E-02	1.95E-06 EPA, 1999		6.52E-05	1.11E-07 EPA, 1999		5.44E-07	1.59E-02	2.53E-07 EPA, 1999		5.10E-04	3.91E-06 EPA, 1999		5.05E-06
4,4-DDE	1.70E-03	1.26E+00	2.14E-03 EPA, 1999		1.26E+00	2.14E-03 EPA, 1999		9.37E-03	1.59E-05 EPA, 1999		2.72E-02	4.33E-07 EPA, 1999		6.52E-05	1.11E-07 EPA, 1999		5.44E-07	1.59E-02	2.53E-07 EPA, 1999		5.10E-04	8.67E-07 EPA, 1999		1.12E-06
4,4-DDT	3.70E-03	1.26E+00	4.66E-03 EPA, 1999		1.26E+00	4.66E-03 EPA, 1999		9.37E-03	3.47E-05 EPA, 1999		2.72E-02	9.43E-07 EPA, 1999		6.52E-05	2.41E-07 EPA, 1999		1.18E-06	1.59E-02	5.51E-07 EPA, 1999		5.10E-04	1.89E-06 EPA, 1999		2.44E-06
Acenaphthene	4.19E-02	7.00E-02	2.93E-03 EPA, 1999*		7.00E-02	2.93E-03 EPA, 1999*		2.02E-02	8.46E-04 EPA, 1999*		5.31E-02	4.49E-05 EPA, 1999*		1.27E-04	5.32E-06 EPA, 1999*		5.03E-05	3.11E-02	2.63E-05 EPA, 1999*		9.98E-04	4.18E-05 EPA, 1999*		6.81E-05
Acenaphthylene	4.20E-02	7.00E-02	2.94E-03 EPA, 1999*		7.00E-02	2.94E-03 EPA, 1999*		2.02E-02	8.48E-04 EPA, 1999*		5.31E-02	4.51E-05 EPA, 1999*		1.27E-04	5.33E-06 EPA, 1999*		5.04E-05	3.11E-02	2.64E-05 EPA, 1999*		9.98E-04	4.19E-05 EPA, 1999*		6.83E-05
Anthracene	8.74E-02	7.00E-02	6.12E-03 EPA, 1999*		7.00E-02	6.12E-03 EPA, 1999*		2.02E-02	1.77E-03 EPA, 1999*		5.31E-02	9.37E-05 EPA, 1999*		1.27E-04	1.11E-05 EPA, 1999*		1.05E-04	3.11E-02	5.49E-05 EPA, 1999*		9.98E-04	8.72E-05 EPA, 1999*		1.42E-04
Antimony	1.02E+00	2.20E-01	2.25E-01 Sample, 1998b		2.20E-01	2.25E-01 Sample, 1998b		2.00E-01	2.05E-01 Bechtel, 1998		5.99E-04	1.23E-04 EPA, 1999		1.44E-06	1.47E-06 Sample, 1998a		1.05E-04	3.11E-02	5.49E-05 EPA, 1999*		1.24E-04	1.47E-06 Sample, 1998		1.24E-04
Asroc-1254	2.05E-01	1.13E+00	2.32E-01 EPA, 1999		1.13E+00	2.32E-01 EPA, 1999		1.00E-02	2.05E-03 EPA, 1999		2.43E-02	4.98E-06 EPA, 1999		5.83E-05	1.20E-05 EPA, 1999		6.18E-05	3.12E-02	2.91E-05 EPA, 1999		4.55E-04	9.33E-05 EPA, 1999		1.22E-04
Arsenic	3.33E+00	1.10E-01	3.66E-01 Sample, 1998b		1.10E-01	3.66E-01 Sample, 1998b		3.60E-02	1.20E-01 Bechtel, 1998		1.20E-03	1.44E-04 EPA, 1999		2.88E-06	9.59E-06 Sample, 1998a		1.53E-04	1.20E-03	1.44E-04 EPA, 1999		2.88E-06	9.59E-06 Sample, 1998		1.53E-04
Barium	2.37E+02	2.20E-01	5.22E+01 Sample, 1998b		2.20E-01	5.22E+01 Sample, 1998b		1.50E-01	3.56E-01 Bechtel, 1998		8.99E-05	3.20E-03 EPA, 1999		2.16E-07	5.13E-05 Sample, 1998a		3.25E-03	8.99E-05	3.20E-03 EPA, 1999		2.16E-07	5.13E-05 Sample, 1998		3.25E-03
Benz(a)anthracene	2.68E-01	3.00E-02	8.04E-03 EPA, 1999		3.00E-02	8.04E-03 EPA, 1999		2.02E-02	5.41E-03 EPA, 1999		7.19E-03	3.89E-05 EPA, 1999		1.73E-05	4.64E-06 EPA, 1999		4.36E-05	4.20E-03	2.27E-05 EPA, 1999		1.35E-04	3.62E-05 EPA, 1999		5.89E-05
Benz(a)pyrene	3.47E-01	7.00E-02	2.43E-02 EPA, 1999		7.00E-02	2.43E-02 EPA, 1999		1.01E-02	3.50E-03 EPA, 1999		2.03E-02	7.11E-05 EPA, 1999		4.86E-05	1.69E-05 EPA, 1999		8.80E-05	1.19E-02	4.17E-05 EPA, 1999		3.81E-04	1.32E-04 EPA, 1999		1.74E-04
Benz(b)fluoranthene	4.66E-01	7.00E-02	3.26E-02 EPA, 1999		7.00E-02	3.26E-02 EPA, 1999		1.01E-02	4.71E-03 EPA, 1999		2.40E-02	1.13E-04 EPA, 1999		5.75E-05	2.68E-05 EPA, 1999		1.40E-04	1.40E-02	6.59E-05 EPA, 1999		4.50E-04	2.10E-04 EPA, 1999		2.76E-04
Benz(k)fluoranthene	2.51E-01	7.00E-02	1.76E-02 EPA, 1999*		7.00E-02	1.76E-02 EPA, 1999*		2.02E-02	5.07E-03 EPA, 1999*		5.31E-02	2.69E-04 EPA, 1999*		1.27E-04	3.19E-05 EPA, 1999*		3.01E-04	3.11E-02	1.58E-04 EPA, 1999*		9.98E-04	2.50E-04 EPA, 1999*		4.08E-04
Benz(k)fluoranthene	1.57E-01	8.00E-02	1.26E-02 EPA, 1999		8.00E-02	1.26E-02 EPA, 1999		1.01E-02	1.59E-03 EPA, 1999		2.39E-02	3.79E-05 EPA, 1999		5.73E-05	9.00E-06 EPA, 1999		4.69E-05	1.39E-02	2.20E-05 EPA, 1999		4.48E-04	7.03E-05 EPA, 1999		9.24E-05
Boron	4.81E+00	1.00E+00	4.81E+00 **		1.00E+00	4.81E+00 **		1.00E+00	4.81E+00 **		1.00E+00	4.81E+00 **		1.00E+00	4.81E+00 **		9.62E+00	1.00E+00	4.81E+00 **		1.00E+00	4.81E+00 **		9.62E+00
Cadmium	3.35E-01	9.60E-01	3.22E-01 Sample, 1998b		9.60E-01	3.22E-01 Sample, 1998b		3.64E-01	1.22E-01 Bechtel, 1998		7.19E-05	8.77E-06 EPA, 1999		1.73E-07	5.80E-08 Sample, 1998a		8.83E-06	4.71E-02	5.74E-03 EPA, 1999		1.51E-03	5.06E-04 EPA, 1999		6.25E-03
Chromium	1.35E+01	1.00E-02	1.35E-01 Sample, 1998b		1.00E-02	1.35E-01 Sample, 1998b		7.50E-03	1.01E-01 Bechtel, 1998		3.30E-03	3.35E-04 EPA, 1999		7.91E-06	1.07E-04 Sample, 1998a		4.42E-04	3.30E-03	3.35E-04 EPA, 1999		7.91E-06	1.07E-04 Sample, 1998		4.42E-04
Chrysene	3.27E-01	4.00E-02	1.31E-02 EPA, 1999		4.00E-02	1.31E-02 EPA, 1999		1.87E-02	6.11E-03 EPA, 1999		8.27E-03	5.06E-05 EPA, 1999		1.99E-05	6.51E-06 EPA, 1999		5.71E-05	4.84E-03	2.96E-05 EPA, 1999		1.55E-04	5.07E-05 EPA, 1999		8.03E-05
Cobalt	4.14E+00	1.00E+00	4.14E+00 **		1.00E+00	4.14E+00 **		7.45E-03	3.09E-02 Bechtel, 1998		1.00E+00	3.09E-02 **		1.00E-01	4.14E-01 Sample, 1998a		4.45E-01	1.00E+00	3.09E-02 **		1.00E-01	4.14E-01 Sample, 1998		4.45E-01
Copper	2.43E+01	4.00E-02	9.70E-01 EPA, 1999		4.00E-02	9.70E-01 EPA, 1999		4.00E-02	9.70E-00 EPA, 1999		4.00E-01	9.70E-00 **		5.25E-02	1.27E+00 Sample, 1998a		1.10E-01	1.00E+00	9.70E-00 **		5.25E-02	1.27E+00 Sample, 1998		1.10E+01
Dibenz(a,h)anthracene	1.13E-01	7.00E-02	7.91E-03 EPA, 1999		7.00E-02	7.91E-03 EPA, 1999		6.40E-03																

TABLE C-1
EXPOSURE POINT CONCENTRATION (mg/kg)
SOIL SOUTH OF MARLIN AVE.

Parameter	Average	95% UCL	Statistic Used
2-Methylnaphthalene	6.98E-02	3.41E-01	97.5% Chebyshev
4,4-DDD	7.66E-03	4.98E-02	97.5% Chebyshev
4,4'-DDE	1.70E-03	5.40E-03	97.5% Chebyshev
4,4'-DDT	3.70E-03	1.25E-02	99% Chebyshev
Acenaphthene	4.19E-02	1.15E-01	97.5% Chebyshev
Acenaphthylene	4.20E-02	1.14E-01	97.5% Chebyshev
Anthracene	8.74E-02	2.10E-01	97.5% Chebyshev
Antimony	1.02E+00	1.58E+00	97.5% Chebyshev
Aroclor-1254	2.05E-01	7.40E-01	97.5% Chebyshev
Arsenic	3.33E+00	4.92E+00	97.5% Chebyshev
Barium	2.37E+02	3.30E+02	95% Chebyshev
Benzo(a)anthracene	2.68E-01	8.59E-01	99% Chebyshev
Benzo(a)pyrene	3.47E-01	1.01E+00	99% Chebyshev
Benzo(b)fluoranthene	4.66E-01	1.26E+00	99% Chebyshev
Benzo(g,h,i)perylene	2.51E-01	5.45E-01	97.5% Chebyshev
Benzo(k)fluoranthene	1.57E-01	3.78E-01	97.5% Chebyshev
Boron	4.81E+00	7.39E+00	97.5% Chebyshev
Cadmium	3.35E-01	7.51E-01	97.5% Chebyshev
Chromium	1.35E+01	1.78E+01	95% Chebyshev
Chrysene	3.27E-01	9.38E-01	99% Chebyshev
Cobalt	4.14E+00	4.41E+00	95% Student's-t
Copper	2.43E+01	4.69E+01	97.5% Chebyshev
Dibenz(a,h)anthracene	1.13E-01	2.36E-01	97.5% Chebyshev
Dieldrin	9.01E-04	2.10E-03	97.5% Chebyshev
Endrin Aldehyde	1.90E-03	5.50E-03	97.5% Chebyshev
Endrin Ketone	1.30E-03	2.90E-03	97.5% Chebyshev
Fluoranthene	5.94E-01	1.89E+00	99% Chebyshev
Fluorene	4.42E-02	1.07E-01	97.5% Chebyshev
gamma-Chlordane	6.90E-04	1.70E-03	97.5% Chebyshev
Indeno(1,2,3-cd)pyrene	3.68E-01	7.61E-01	97.5% Chebyshev
Lead	5.35E+01	1.04E+02	97.5% Chebyshev
Lithium	1.00E+01	1.22E+01	95% Chebyshev
Manganese	2.61E+02	2.78E+02	95% Student's-t
Mercury	2.62E-02	7.18E-02	97.5% Chebyshev
Molybdenum	8.90E-01	1.61E+00	97.5% Chebyshev
Naphthalene	3.23E-01	2.78E+00	99% Chebyshev
Nickel	1.17E+01	1.24E+01	95% Student's-t
Phenanthrene	4.01E-01	1.35E+00	99% Chebyshev
Pyrene	4.32E-01	1.29E+00	99% Chebyshev
Vanadium	1.44E+01	1.52E+01	95% Approx. Gamma
Zinc	4.34E+02	8.15E+02	97.5% Chebyshev
LPAH	1.01E+00	5.01E+00	
HPAH	3.32E+00	9.16E+00	
TOTAL PAHs	4.33E+00	1.42E+01	

TABLE C-2
EXPOSURE POINT CONCENTRATION (mg/kg)
SURFACE SOIL SOUTH OF MARLIN AVE.

Parameter	Average	95% UCL	Statistic Used
2-Methylnaphthalene	2.93E-02	7.84E-02	97.5% Chebyshev
4,4-DDD	7.89E-04	2.90E-03	97.5% Chebyshev
4,4'-DDE	1.90E-03	7.40E-03	97.5% Chebyshev
4,4'-DDT	3.80E-03	1.40E-02	99% Chebyshev
Acenaphthene	5.95E-02	1.97E-01	97.5% Chebyshev
Acenaphthylene	3.82E-02	1.13E-01	97.5% Chebyshev
Anthracene	9.61E-02	2.97E-01	97.5% Chebyshev
Antimony	1.12E+00	1.96E+00	97.5% Chebyshev
Aroclor-1254	1.37E-01	7.26E-01	97.5% Chebyshev
Arsenic	3.74E+00	4.54E+00	95% Approx. Gamma
Barium	3.45E+02	4.15E+02	95% H-UCL
Benzo(a)anthracene	3.45E-01	1.21E+00	97.5% Chebyshev
Benzo(a)pyrene	4.57E-01	1.46E+00	97.5% Chebyshev
Benzo(b)fluoranthene	5.82E-01	1.64E+00	97.5% Chebyshev
Benzo(g,h,i)perylene	3.24E-01	1.10E+00	97.5% Chebyshev
Benzo(k)fluoranthene	2.40E-01	6.51E-01	97.5% Chebyshev
Boron	4.66E+00	9.66E+00	97.5% Chebyshev
Cadmium	4.64E-01	1.71E+00	99% Chebyshev
Chromium	1.61E+01	1.75E+01	95% H-UCL
Chrysene	4.09E-01	1.32E+00	99% Chebyshev
Cobalt	3.71E+00	4.78E+00	95% Chebyshev
Copper	2.80E+01	3.25E+01	95% H-UCL
Dibenz(a,h)anthracene	1.55E-01	3.63E-01	97.5% Chebyshev
Dieldrin	9.97E-04	3.00E-03	97.5% Chebyshev
Endrin Aldehyde	2.30E-03	8.40E-03	97.5% Chebyshev
Endrin Ketone	1.60E-03	4.00E-03	97.5% Chebyshev
Fluoranthene	7.99E-01	2.66E+00	97.5% H-UCL
Fluorene	5.15E-02	1.55E-01	97.5% Chebyshev
gamma-Chlordane	8.27E-04	2.50E-03	97.5% Chebyshev
Indeno(1,2,3-cd)pyrene	4.70E-01	1.12E+00	97.5% Chebyshev
Lead	6.96E+01	8.45E+01	95% H-UCL
Lithium	7.86E+00	9.06E+00	95% Approx. Gamma
Manganese	2.57E+02	2.81E+02	95% Student's-t
Mercury	2.27E-02	2.54E-02	95% H-UCL
Molybdenum	1.31E+00	1.65E+00	95% Approx. Gamma
Naphthalene			NS
Nickel	1.16E+01	1.25E+01	95% Approx. Gamma
Phenanthrene	5.12E-01	2.20E+00	97.5% Chebyshev
Pyrene	5.33E-01	1.37E+00	95% H-UCL
Vanadium	1.38E+01	1.48E+01	95% Approx. Gamma
Zinc	6.01E+02	7.28E+02	95% Approx. Gamma
LPAH	7.87E-01	3.04E+00	
HPAH	4.31E+00	1.29E+01	
TOTAL PAHs	5.10E+00	1.59E+01	

Notes:

NS - Not sampled in surface soil.

TABLE C-3
TOXICITY VALUES

Parameter	Earthworm (mg/kg)	Ref.	Comments	Deer Mouse (mg/kgBW-day)	Ref.	Comments	Coyote (mg/kgBW-day)	Ref.	Comments	Least Shrew (mg/kgBW-day)	Ref.	Comments	American Robin (mg/kgBW-day)	Ref.	Comments	Red-tailed Hawk (mg/kgBW-day)	Ref.	Comments	
2-Methylnaphthalene																			
4,4-DDD	4.30E-02	EPA, 2007a	Acute median LC50 in common cricket (dose 4.3 with uncertainty factor of 0.01)	1.47E-01	EPA, 2007a	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	1.47E-01	EPA, 2007a	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	1.47E-01	EPA, 2007a	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	2.27E-01	EPA, 2007a	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	2.27E-01	EPA, 2007a	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	
4,4'-DDE	4.30E-02	EPA, 2007a	Acute median LC50 in common cricket (dose 4.3 with uncertainty factor of 0.01)	1.47E-01	EPA, 2007a	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	1.47E-01	EPA, 2007a	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	1.47E-01	EPA, 2007a	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	2.27E-01	EPA, 2007a	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	2.27E-01	EPA, 2007a	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	
4,4'-DDT	4.30E-02	EPA, 2007a	Acute median LC50 in common cricket (dose 4.3 with uncertainty factor of 0.01)	1.47E-01	EPA, 2007a	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	1.47E-01	EPA, 2007a	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	1.47E-01	EPA, 2007a	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	2.27E-01	EPA, 2007a	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	2.27E-01	EPA, 2007a	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	
Acenaphthene																			
Acenaphthylene																			
Anthracene																			
Antimony	3.00E+01	EPA, 2005a	EC20 for earthworms	1.25E-01	Sample, 1996	Chronic LOAEL in mouse with an uncertainty factor of 0.1	1.25E-01	Sample, 1996	Chronic LOAEL in mouse with an uncertainty factor of 0.1	1.25E-01	Sample, 1996	Chronic LOAEL in mouse with an uncertainty factor of 0.1							
Aroclor-1254	2.51E+00	EPA, 1999	Acute median LC50 in earthworms (dose 251 with uncertainty factor of 0.01)	1.55E-01	Sample, 1996	Chronic LOAEL for reproduction in mouse with an uncertainty factor of 0.1	1.55E-01	Sample, 1996	Chronic LOAEL for reproduction in mouse with an uncertainty factor of 0.1	1.55E-01	Sample, 1996	Chronic LOAEL for reproduction in mouse with an uncertainty factor of 0.1	1.80E-01	Sample, 1996					
Arsenic	6.00E+01	TCEQ, 2006		1.85E+00	EPA, 1999		1.22E+00	EPA, 1999		2.00E+00	EPA, 1999		2.71E+00	EPA, 1999		4.46E+00	EPA, 1999		
Barium	3.30E+02	EPA, 2005g	Geometric mean of the EC20 values for three test species under three separate test conditions of pH	5.18E+01	EPA, 2005g	Geometric mean of NOAEL values for reproduction and growth	4.10E-01	EPA, 1999		5.18E+01	EPA, 2005g	Geometric mean of NOAEL values for reproduction and growth	1.91E+01	EPA, 1999		3.15E+01	EPA, 1999		
Benz(a)anthracene																			
Benzo(a)pyrene																			
Benzo(b)fluoranthene																			
Benzo(g,h,i)perylene																			
Benzo(k)fluoranthene																			
Boron				3.40E+01	Sample, 1996		2.20E+01	Sample, 1996		3.70E+01	Sample, 1996		1.74E+01	Sample, 1996		2.86E+01	Sample, 1996		
Cadmium	1.00E+01	EPA, 1999	Chronic (4-month) NOAEL for cocoon production in earthworm (dose 10)	7.70E-01	EPA, 2005b	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	7.70E-01	EPA, 2005b	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	7.70E-01	EPA, 2005b	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	1.47E+00	EPA, 1999	Geometric mean of NOAEL values for reproduction and growth	1.47E+00	EPA, 1999	Geometric mean of NOAEL values for reproduction and growth	
Chromium	5.70E+01	EPA, 2005c	Maximum acceptable toxicant concentration (MATC) for reproductive effects in earthworm	2.40E+00	EPA, 2005c	Geometric mean of NOAEL values for reproduction and growth	2.40E+00	EPA, 2005c	Geometric mean of NOAEL values for reproduction and growth	2.40E+00	EPA, 2005c	Geometric mean of NOAEL values for reproduction and growth	2.66E+00	EPA, 2005c	Geometric mean of the NOAEL values for reproduction and growth	2.66E+00	EPA, 2005c	Geometric mean of the NOAEL values for reproduction and growth	
Chrysene																			
Cobalt																			
Copper	8.00E+01	EPA, 2007c	Geometric mean of the MATC and EC10 values for six test species under different test species	5.60E+00	EPA, 2007c	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	5.60E+00	EPA, 2007c	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	5.60E+00	EPA, 2007c	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	4.05E+00	EPA, 2007c	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	4.05E+00	EPA, 2007c	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	
Dibenz(a,h)anthracene																			
Dieldrin					1.50E-02	EPA, 2005f	Highest bounded NOAEL for growth lower than the lowest bounded LOAEL for reproduction, growth, and survival	1.50E-02	EPA, 2005f	Highest bounded NOAEL for growth lower than the lowest bounded LOAEL for reproduction, growth, and survival	1.50E-02	EPA, 2005f	Highest bounded NOAEL for growth lower than the lowest bounded LOAEL for reproduction, growth, and survival	7.09E-02	EPA, 2005f	Highest bounded NOAEL for growth lower than the lowest bounded LOAEL for reproduction, growth, and survival	7.09E-02	EPA, 2005f	Highest bounded NOAEL for growth lower than the lowest bounded LOAEL for reproduction, growth, and survival
Endrin Aldehyde				9.20E-02	Sample, 1996	Chronic LOAEL in mouse with an uncertainty factor of 0.1	9.20E-02	Sample, 1996	Chronic LOAEL in mouse with an uncertainty factor of 0.1	9.20E-02	Sample, 1996	Chronic LOAEL in screech owl with an uncertainty factor of 0.1	1.00E-02	Sample, 1996	Chronic LOAEL in screech owl with an uncertainty factor of 0.1	1.00E-02	Sample, 1996	Chronic LOAEL in screech owl with an uncertainty factor of 0.1	

TOXICITY VALUES

Parameter	Earthworm (mg/kg)	Ref.	Comments	Deer Mouse (mg/kgBW-day)	Ref.	Comments	Coyote (mg/kgBW-day)	Ref.	Comments	Least Shrew (mg/kgBW-day)	Ref.	Comments	American Robin (mg/kgBW-day)	Ref.	Comments	Red-tailed Hawk (mg/kgBW-day)	Ref.	Comments	
Endrin Ketone				9.20E-02	Sample, 1996	Chronic LOAEL in mouse with an uncertainty factor of 0.1	9.20E-02	Sample, 1996	Chronic LOAEL in mouse with an uncertainty factor of 0.1	9.20E-02	Sample, 1996	Chronic LOAEL in mouse with an uncertainty factor of 0.1	1.00E-02	Sample, 1996	Chronic LOAEL in screech owl with an uncertainty factor of 0.1	1.00E-02	Sample, 1996	Chronic LOAEL in screech owl with an uncertainty factor of 0.1	
Fluoranthene																			
Fluorene																			
gamma-Chlordane				4.60E+00	Sample, 1996	Chronic NOAEL in mouse	4.60E+00	Sample, 1996	Chronic NOAEL in mouse	4.60E+00	Sample, 1996	Chronic NOAEL in mouse	2.14E+00	Sample, 1996	Chronic NOAEL in red-winged blackbird	2.14E+00	Sample, 1996	Chronic NOAEL in red-winged blackbird	
Indeno(1,2,3-cd)pyrene																			
Lead	1.70E+03	EPA, 2005e	Geometric mean of MATC values for one test species under different pH	4.70E+00	EPA, 2005e	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	4.70E+00	EPA, 2005e	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	4.70E+00	EPA, 2005e	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	1.63E+00	EPA, 2005e	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	1.63E+00	EPA, 2005e	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	
Lithium				1.10E+01	Sample, 1996		7.50E+00	Sample, 1996		1.20E+01	Sample, 1996								
Manganese				1.06E+02	Sample, 1996		7.00E+01	Sample, 1996		1.15E+02	Sample, 1996		9.98E+02	Sample, 1996		1.64E+03	Sample, 1996		
Mercury	2.50E+00	EPA, 1999	Toxicity value not available -- TRV for methyl mercury was used as a surrogate	1.01E+00	EPA, 1999	Chronic (6-months) NOAEL for reproduction in mink (dose 1.01 with uncertainty factor of 1)	1.01E+00	EPA, 1999	Chronic (6-months) NOAEL for reproduction in mink (dose 1.01 with uncertainty factor of 1)	1.01E+00	EPA, 1999	Chronic (6-months) NOAEL for reproduction in mink (dose 1.01 with uncertainty factor of 1)	3.25E+00	EPA, 1999	Acute (5 days) LOAEL for mortality in coturnix quail (dose 325 with uncertainty factor of 0.01)	3.25E+00	EPA, 1999	Acute (5 days) LOAEL for mortality in coturnix quail (dose 325 with uncertainty factor of 0.01)	
Molybdenum				2.70E-01	Sample, 1996		1.80E-01	Sample, 1996		2.90E-01	Sample, 1996		1.90E+00	Sample, 1996		3.30E+00	Sample, 1996		
Naphthalene																			
Nickel	2.80E+02	EPA, 2007d	Geometric mean of MATC values for five species under different test conditions	1.70E+00	EPA, 2007d	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	1.70E+00	EPA, 2007d	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	1.70E+00	EPA, 2007d	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	6.71E+00	EPA, 2007d	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	6.71E+00	EPA, 2007d	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	
Phenanthrene																			
Pyrene																			
Vanadium	1.00E+02	EPA, 2005d	LOAEC/NOAEC for growth in broccoli -- used as a surrogate for invertebrates	4.16E+00	EPA, 2005d	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	4.16E+00	EPA, 2005d	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	4.16E+00	EPA, 2005d	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	3.44E-01	EPA, 2005d	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	3.44E-01	EPA, 2005d	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	
Zinc	1.20E+02	EPA, 2007e	Geometric mean of the MATC and EC10 values for three test species under different test species	7.54E+01	EPA, 2007e	Geometric mean of NOAEL values for reproduction and growth	7.54E+01	EPA, 2007e	Geometric mean of NOAEL values for reproduction and growth	7.54E+01	EPA, 2007e	Geometric mean of NOAEL values for reproduction and growth	6.61E+01	EPA, 2007e	Geometric mean of NOAEL values within the reproductive and growth effect groups	6.61E+01	EPA, 2007e	Geometric mean of NOAEL values within the reproductive and growth effect groups	
LPAH	2.90E+01	EPA, 2007b		6.56E+01	EPA, 2007b	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	6.56E+01	EPA, 2007b	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	6.56E+01	EPA, 2007b	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival							
HPAH	1.80E+01	EPA, 2007b		6.15E-01	EPA, 2007b	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	6.15E-01	EPA, 2007b	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival	6.15E-01	EPA, 2007b	Highest bounded NOAEL for growth and reproduction lower than the lowest bounded LOAEL for reproduction, growth, and survival							
TOTAL PAHs																			

Notes:

EPA, 2007a -- DDT
 EPA, 2007b -- PAHs
 EPA, 2007c -- Copper
 EPA, 2007d -- Nickel
 EPA, 2007e -- Zinc
 EPA, 2005a -- Antimony
 EPA, 2005b -- Cadmium
 EPA, 2005c -- Chromium
 EPA, 2005d -- Vanadium
 EPA, 2005e -- Lead
 EPA, 2005f -- Dieldrin
 EPA, 2005g -- Barium

TABLE C-4
ECOLOGICAL HAZARD QUOTIENT CALCULATIONS FOR SOIL SOUTH OF MARLIN
EARTHWORM

Ecological Hazard Quotient = Sc/TRV					
Parameter	Definition	Default			
Sc	Soil Concentration (mg/kg)	see below			
TRV	Toxicity Reference Value (mg/kg)	see TRV summary page			
Chemical	Average Sc	RME Sc	TRV (earthworm)	Average EHQ	RME EHQ
2-Methylnaphthalene	6.98E-02	3.41E-01			
4,4'-DDD	7.66E-03	4.98E-02	4.30E-02	1.78E-01	1.16E+00
4,4'-DDE	1.70E-03	5.40E-03	4.30E-02	3.95E-02	1.26E-01
4,4'-DDT	3.70E-03	1.25E-02	4.30E-02	8.60E-02	2.91E-01
Acenaphthene	4.19E-02	1.15E-01			
Acenaphthylene	4.20E-02	1.14E-01			
Anthracene	8.74E-02	2.10E-01			
Antimony	1.02E+00	1.58E+00	3.00E+01	3.41E-02	5.25E-02
Aroclor-1254	2.05E-01	7.40E-01	2.51E+00	8.17E-02	2.95E-01
Arsenic	3.33E+00	4.92E+00	6.00E+01	5.55E-02	8.19E-02
Barium	2.37E+02	3.30E+02	3.30E+02	7.19E-01	1.00E+00
Benzo(a)anthracene	2.68E-01	8.59E-01			
Benzo(a)pyrene	3.47E-01	1.01E+00			
Benzo(b)fluoranthene	4.66E-01	1.26E+00			
Benzo(g,h,i)perylene	2.51E-01	5.45E-01			
Benzo(k)fluoranthene	1.57E-01	3.78E-01			
Boron	4.81E+00	7.39E+00			
Cadmium	3.35E-01	7.51E-01	1.00E+01	3.35E-02	7.51E-02
Chromium	1.35E+01	1.78E+01	5.70E+01	2.37E-01	3.11E-01
Chrysene	3.27E-01	9.38E-01			
Cobalt	4.14E+00	4.41E+00			
Copper	2.43E+01	4.69E+01	8.00E+01	3.03E-01	5.87E-01
Dibenz(a,h)anthracene	1.13E-01	2.36E-01			
Dieldrin	9.01E-04	2.10E-03			
Endrin Aldehyde	1.90E-03	5.50E-03			
Endrin Ketone	1.30E-03	2.90E-03			
Fluoranthene	5.94E-01	1.89E+00			
Fluorene	4.42E-02	1.07E-01			
gamma-Chlordane	6.90E-04	1.70E-03			
Indeno(1,2,3-cd)pyrene	3.68E-01	7.61E-01			
Lead	5.35E+01	1.04E+02	1.70E+03	3.15E-02	6.12E-02
Lithium	1.00E+01	1.22E+01			
Manganese	2.61E+02	2.78E+02			
Mercury	2.62E-02	7.18E-02	2.50E+00	1.05E-02	2.87E-02
Molybdenum	8.90E-01	1.61E+00			
Naphthalene	3.23E-01	2.78E+00			
Nickel	1.17E+01	1.24E+01	2.80E+02	4.19E-02	4.42E-02
Phenanthrene	4.01E-01	1.35E+00			
Pyrene	4.32E-01	1.29E+00			
Vanadium	1.44E+01	1.52E+01	1.00E+02	1.44E-01	1.52E-01
Zinc	4.34E+02	8.15E+02	1.20E+02	3.62E+00	6.79E+00
LPAH	1.01E+00	5.01E+00	2.90E+01	3.48E-02	1.73E-01
HPAH	3.32E+00	9.16E+00	1.80E+01	1.85E-01	5.09E-01
TOTAL PAHs	4.33E+00	1.42E+01			

TABLE C-5
INTAKE CALCULATIONS FOR SOIL SOUTH OF MARLIN
DEER MOUSE

SOIL INGESTION				
Parameter	Definition	Value	Reference	
Intake	Intake of chemical (mg/kg-day)	calculated		
Sc	Soil concentration (mg/kg)	see data page		
IR	Ingestion rate of soil (kg/day)	5.68E-05	EPA, 2009 (normalized for bw)	
AF	Chemical Bioavailability in soil (unitless)	1	EPA, 1997	
AUF	Area Use Factor	1	EPA, 1997	
BW	Body weight (kg)	1.48E-02	EPA, 1999	

Chemical	Average Sc	RME Sc	Average Intake	RME Intake
2-Methylnaphthalene	6.98E-02	3.41E-01	2.68E-04	1.31E-03
4,4-DDD	7.66E-03	4.98E-02	2.94E-05	1.91E-04
4,4'-DDE	1.70E-03	5.40E-03	6.52E-06	2.07E-05
4,4'-DDT	3.70E-03	1.25E-02	1.42E-05	4.80E-05
Acenaphthene	4.19E-02	1.15E-01	1.61E-04	4.41E-04
Acenaphthylene	4.20E-02	1.14E-01	1.61E-04	4.37E-04
Anthracene	8.74E-02	2.10E-01	3.35E-04	8.06E-04
Antimony	1.02E+00	1.58E+00	3.92E-03	6.05E-03
Aroclor-1254	2.05E-01	7.40E-01	7.86E-04	2.84E-03
Arsenic	3.33E+00	4.92E+00	1.28E-02	1.89E-02
Barium	2.37E+02	3.30E+02	9.11E-01	1.27E+00
Benzo(a)anthracene	2.68E-01	8.59E-01	1.03E-03	3.30E-03
Benzo(a)pyrene	3.47E-01	1.01E+00	1.33E-03	3.87E-03
Benzo(b)fluoranthene	4.66E-01	1.26E+00	1.79E-03	4.82E-03
Benzo(g,h,i)perylene	2.51E-01	5.45E-01	9.63E-04	2.09E-03
Benzo(k)fluoranthene	1.57E-01	3.78E-01	6.02E-04	1.45E-03
Boron	4.81E+00	7.39E+00	1.85E-02	2.83E-02
Cadmium	3.35E-01	7.51E-01	1.29E-03	2.88E-03
Chromium	1.35E+01	1.78E+01	5.19E-02	6.81E-02
Chrysene	3.27E-01	9.38E-01	1.25E-03	3.60E-03
Cobalt	4.14E+00	4.41E+00	1.59E-02	1.69E-02
Copper	2.43E+01	4.69E+01	9.31E-02	1.80E-01
Dibenz(a,h)anthracene	1.13E-01	2.36E-01	4.33E-04	9.05E-04
Dieldrin	9.01E-04	2.10E-03	3.46E-06	8.06E-06
Endrin Aldehyde	1.90E-03	5.50E-03	7.29E-06	2.11E-05
Endrin Ketone	1.30E-03	2.90E-03	4.99E-06	1.11E-05
Fluoranthene	5.94E-01	1.89E+00	2.28E-03	7.23E-03
Fluorene	4.42E-02	1.07E-01	1.70E-04	4.10E-04
gamma-Chlordane	6.90E-04	1.70E-03	2.65E-06	6.52E-06
Indeno(1,2,3-cd)pyrene	3.68E-01	7.61E-01	1.41E-03	2.92E-03
Lead	5.35E+01	1.04E+02	2.05E-01	3.99E-01
Lithium	1.00E+01	1.22E+01	3.85E-02	4.67E-02
Manganese	2.61E+02	2.78E+02	1.00E+00	1.06E+00
Mercury	2.62E-02	7.18E-02	1.01E-04	2.75E-04
Molybdenum	8.90E-01	1.61E+00	3.41E-03	6.18E-03
Naphthalene	3.23E-01	2.78E+00	1.24E-03	1.06E-02
Nickel	1.17E+01	1.24E+01	4.50E-02	4.75E-02
Phenanthrene	4.01E-01	1.35E+00	1.54E-03	5.17E-03
Pyrene	4.32E-01	1.29E+00	1.66E-03	4.95E-03
Vanadium	1.44E+01	1.52E+01	5.52E-02	5.82E-02
Zinc	4.34E+02	8.15E+02	1.66E+00	3.13E+00
LPAH	1.01E+00	5.01E+00	3.87E-03	1.92E-02
HPAH	3.32E+00	9.16E+00	1.27E-02	3.51E-02
TOTAL PAHs	4.33E+00	1.42E+01	1.66E-02	5.43E-02

TABLE C-5
INTAKE CALCULATIONS FOR SOIL SOUTH OF MARLIN
DEER MOUSE

FOOD INGESTION						
INTAKE = ((Ca * IR * DFA * AUF) / (BW) + ((Cp * IR * DFS * AUF)/(BW))						
Parameter	Definition				Value	Reference
Intake	Intake of chemical (mg/kg-day)				calculated	
Ca	Arthropod concentration (mg/kg)		see FoodConc page			
Cp	Plant concentration (mg/kg)		see FoodConc page			
IR	Ingestion rate of food (kg/day)		2.84E-03		EPA, 1993 (normalized for bw)	
Dfa	Dietary fraction of arthropods (unitless)		1.00E-01		EPA, 2009	
Dfs	Dietary fraction of plants, seeds and other vegetation (unitless)		9.00E-01		EPA, 2009	
AUF	Area Use Factor		1		EPA, 1997	
BW	Body weight (kg)		1.48E-02		EPA, 1999	
Chemical	Average Arthropod	RME Arthropod	Average Plant	RME Plant	Average Intake	RME Intake
2-Methylnaphthalene	4.89E-03	2.39E-02	1.41E-03	6.89E-03	3.37E-04	1.65E-03
4,4-DDD	9.65E-03	6.27E-02	7.18E-05	4.67E-04	1.98E-04	1.28E-03
4,4'-DDE	2.14E-03	6.80E-03	1.59E-05	5.06E-05	4.38E-05	1.39E-04
4,4'-DDT	4.66E-03	1.58E-02	3.47E-05	1.17E-04	9.54E-05	3.22E-04
Acenaphthene	2.93E-03	8.05E-03	8.46E-04	2.32E-03	2.02E-04	5.55E-04
Acenaphthylene	2.94E-03	7.98E-03	8.48E-04	2.30E-03	2.03E-04	5.51E-04
Anthracene	6.12E-03	1.47E-02	1.77E-03	4.24E-03	4.22E-04	1.01E-03
Antimony	2.25E-01	3.47E-01	2.05E-01	3.15E-01	3.96E-02	6.11E-02
Aroclor-1254	2.32E-01	8.36E-01	2.05E-03	7.40E-03	4.80E-03	1.73E-02
Arsenic	3.66E-01	5.41E-01	1.20E-01	1.77E-01	2.77E-02	4.09E-02
Barium	5.22E+01	7.27E+01	3.56E+01	4.96E+01	7.15E+00	9.95E+00
Benzo(a)anthracene	8.04E-03	2.58E-02	5.41E-03	1.74E-02	1.09E-03	3.49E-03
Benzo(a)pyrene	2.43E-02	7.06E-02	3.50E-03	1.02E-02	1.07E-03	3.11E-03
Benzo(b)fluoranthene	3.26E-02	8.79E-02	4.71E-03	1.27E-02	1.44E-03	3.88E-03
Benzo(g,h,i)perylene	1.76E-02	3.82E-02	5.07E-03	1.10E-02	1.21E-03	2.63E-03
Benzo(k)fluoranthene	1.26E-02	3.02E-02	1.59E-03	3.82E-03	5.15E-04	1.24E-03
Boron	4.81E+00	7.39E+00	4.81E+00	7.39E+00	9.23E-01	1.42E+00
Cadmium	3.22E-01	7.21E-01	1.22E-01	2.73E-01	2.72E-02	6.10E-02
Chromium	1.35E-01	1.78E-01	1.01E-01	1.33E-01	2.01E-02	2.64E-02
Chrysene	1.31E-02	3.75E-02	6.11E-03	1.75E-02	1.31E-03	3.75E-03
Cobalt	4.14E+00	4.41E+00	3.09E-02	3.28E-02	8.48E-02	9.02E-02
Copper	9.70E-01	1.88E+00	9.70E+00	1.88E+01	1.69E+00	3.28E+00
Dibenz(a,h)anthracene	7.91E-03	1.65E-02	7.23E-04	1.51E-03	2.77E-04	5.78E-04
Dieldrin	1.32E-02	3.09E-02	3.14E-05	7.33E-05	2.59E-04	6.05E-04
Endrin Aldehyde	1.90E-03	5.50E-03	1.09E-04	3.17E-04	5.53E-05	1.60E-04
Endrin Ketone	1.30E-03	2.90E-03	7.49E-05	1.67E-04	3.79E-05	8.45E-05
Fluoranthene	4.16E-02	1.32E-01	1.20E-02	3.81E-02	2.87E-03	9.11E-03
Fluorene	3.09E-03	7.49E-03	8.93E-04	2.16E-03	2.13E-04	5.17E-04
gamma-Chlordane	6.90E-04	1.70E-03	9.87E-06	2.43E-05	1.49E-05	3.68E-05
Indeno(1,2,3-cd)pyrene	2.94E-02	6.09E-02	1.44E-03	2.97E-03	8.12E-04	1.68E-03
Lead	1.61E+00	3.12E+00	2.41E+00	4.68E+00	4.47E-01	8.68E-01
Lithium	1.00E+01	1.22E+01	1.00E+01	1.22E+01	1.92E+00	2.33E+00
Manganese	1.58E+01	1.68E+01	2.07E+01	2.20E+01	3.87E+00	4.12E+00
Mercury	2.23E-01	6.10E-01	3.59E-03	9.84E-03	4.89E-03	1.34E-02
Molybdenum	8.90E-03	1.61E-02	6.68E-03	1.21E-02	1.32E-03	2.39E-03
Naphthalene	2.26E-02	1.94E-01	6.52E-03	5.61E-02	1.56E-03	1.34E-02
Nickel	2.35E-01	2.47E-01	3.76E-01	3.96E-01	6.94E-02	7.31E-02
Phenanthrene	2.81E-02	9.44E-02	8.10E-03	2.72E-02	1.94E-03	6.52E-03
Pyrene	3.02E-02	9.03E-02	8.73E-03	2.61E-02	2.09E-03	6.23E-03
Vanadium	1.44E-01	1.52E-01	1.08E-01	1.14E-01	2.14E-02	2.25E-02
Zinc	2.43E+02	4.57E+02	5.21E-10	9.78E-10	4.66E+00	8.76E+00
LPAH	7.07E-02	3.51E-01	2.04E-02	1.01E-01	4.87E-03	2.42E-02
HPAH	2.33E-01	6.41E-01	6.71E-02	1.85E-01	1.60E-02	4.42E-02
TOTAL PAHs	3.03E-01	9.92E-01	8.66E-02	2.83E-01	2.08E-02	6.79E-02

TABLE C-5
INTAKE CALCULATIONS FOR SOIL SOUTH OF MARLIN
DEER MOUSE

TOTAL INTAKE		
INTAKE = Soil Intake + Food Intake		
Chemical	TOTAL Average Intake	TOTAL RME Intake
2-Methylnaphthalene	6.05E-04	2.96E-03
4,4-DDD	2.27E-04	1.48E-03
4,4'-DDE	5.04E-05	1.60E-04
4,4'-DDT	1.10E-04	3.70E-04
Acenaphthene	3.63E-04	9.97E-04
Acenaphthylene	3.64E-04	9.88E-04
Anthracene	7.57E-04	1.82E-03
Antimony	4.36E-02	6.71E-02
Aroclor-1254	5.58E-03	2.02E-02
Arsenic	4.05E-02	5.98E-02
Barium	8.06E+00	1.12E+01
Benzo(a)anthracene	2.12E-03	6.78E-03
Benzo(a)pyrene	2.40E-03	6.98E-03
Benzo(b)fluoranthene	3.23E-03	8.69E-03
Benzo(g,h,i)perylene	2.18E-03	4.72E-03
Benzo(k)fluoranthene	1.12E-03	2.69E-03
Boron	9.41E-01	1.45E+00
Cadmium	2.85E-02	6.39E-02
Chromium	7.20E-02	9.45E-02
Chrysene	2.56E-03	7.35E-03
Cobalt	1.01E-01	1.07E-01
Copper	1.79E+00	3.46E+00
Dibenz(a,h)anthracene	7.10E-04	1.48E-03
Dieldrin	2.63E-04	6.13E-04
Endrin Aldehyde	6.26E-05	1.81E-04
Endrin Ketone	4.28E-05	9.56E-05
Fluoranthene	5.15E-03	1.63E-02
Fluorene	3.83E-04	9.27E-04
gamma-Chlordane	1.76E-05	4.33E-05
Indeno(1,2,3-cd)pyrene	2.22E-03	4.60E-03
Lead	6.52E-01	1.27E+00
Lithium	1.96E+00	2.38E+00
Manganese	4.88E+00	5.18E+00
Mercury	4.99E-03	1.37E-02
Molybdenum	4.74E-03	8.57E-03
Naphthalene	2.80E-03	2.40E-02
Nickel	1.14E-01	1.21E-01
Phenanthrene	3.47E-03	1.17E-02
Pyrene	3.74E-03	1.12E-02
Vanadium	7.66E-02	8.07E-02
Zinc	6.32E+00	1.19E+01
LPAH	8.75E-03	4.34E-02
HPAH	2.88E-02	7.94E-02
TOTAL PAHs	3.75E-02	1.23E-01

TABLE C-6
INTAKE CALCULATIONS FOR SOIL SOUTH OF MARLIN
COYOTE

SOIL INGESTION				
INTAKE = (Sc * IR * AF * AUF) / (BW)				
Parameter	Definition	Value	Reference	
Intake	Intake of chemical (mg/kg-day)	calculated		
Sc	Soil concentration (mg/kg)	see data page		
IR	Ingestion rate of soil (kg/day)	1.31E-02	EPA, 2009 (normalized for bw)	
AF	Chemical Bioavailability in soil (unitless)	1	EPA, 1997	
AUF	Area Use Factor	1	EPA, 1997	
BW	Body weight (kg)	1.55E+01	EPA, 1993	
Chemical	Average Sc	RME Sc	Average Intake	RME Intake
2-Methylnaphthalene	6.98E-02	3.41E-01	5.89E-05	2.88E-04
4,4-DDD	7.66E-03	4.98E-02	6.46E-06	4.20E-05
4,4'-DDE	1.70E-03	5.40E-03	1.43E-06	4.56E-06
4,4'-DDT	3.70E-03	1.25E-02	3.12E-06	1.05E-05
Acenaphthene	4.19E-02	1.15E-01	3.53E-05	9.70E-05
Acenaphthylene	4.20E-02	1.14E-01	3.54E-05	9.62E-05
Anthracene	8.74E-02	2.10E-01	7.37E-05	1.77E-04
Antimony	1.02E+00	1.58E+00	8.63E-04	1.33E-03
Aroclor-1254	2.05E-01	7.40E-01	1.73E-04	6.24E-04
Arsenic	3.33E+00	4.92E+00	2.81E-03	4.15E-03
Barium	2.37E+02	3.30E+02	2.00E-01	2.79E-01
Benzo(a)anthracene	2.68E-01	8.59E-01	2.26E-04	7.25E-04
Benzo(a)pyrene	3.47E-01	1.01E+00	2.93E-04	8.50E-04
Benzo(b)fluoranthene	4.66E-01	1.26E+00	3.93E-04	1.06E-03
Benzo(g,h,i)perylene	2.51E-01	5.45E-01	2.12E-04	4.60E-04
Benzo(k)fluoranthene	1.57E-01	3.78E-01	1.32E-04	3.19E-04
Boron	4.81E+00	7.39E+00	4.06E-03	6.23E-03
Cadmium	3.35E-01	7.51E-01	2.83E-04	6.34E-04
Chromium	1.35E+01	1.78E+01	1.14E-02	1.50E-02
Chrysene	3.27E-01	9.38E-01	2.76E-04	7.91E-04
Cobalt	4.14E+00	4.41E+00	3.50E-03	3.72E-03
Copper	2.43E+01	4.69E+01	2.05E-02	3.96E-02
Dibenz(a,h)anthracene	1.13E-01	2.36E-01	9.53E-05	1.99E-04
Dieldrin	9.01E-04	2.10E-03	7.60E-07	1.77E-06
Endrin Aldehyde	1.90E-03	5.50E-03	1.60E-06	4.64E-06
Endrin Ketone	1.30E-03	2.90E-03	1.10E-06	2.45E-06
Fluoranthene	5.94E-01	1.89E+00	5.01E-04	1.59E-03
Fluorene	4.42E-02	1.07E-01	3.73E-05	9.03E-05
gamma-Chlordane	6.90E-04	1.70E-03	5.82E-07	1.43E-06
Indeno(1,2,3-cd)pyrene	3.68E-01	7.61E-01	3.10E-04	6.42E-04
Lead	5.35E+01	1.04E+02	4.51E-02	8.77E-02
Lithium	1.00E+01	1.22E+01	8.46E-03	1.03E-02
Manganese	2.61E+02	2.78E+02	2.20E-01	2.34E-01
Mercury	2.62E-02	7.18E-02	2.21E-05	6.06E-05
Molybdenum	8.90E-01	1.61E+00	7.51E-04	1.36E-03
Naphthalene	3.23E-01	2.78E+00	2.72E-04	2.34E-03
Nickel	1.17E+01	1.24E+01	9.90E-03	1.04E-02
Phenanthrene	4.01E-01	1.35E+00	3.38E-04	1.14E-03
Pyrene	4.32E-01	1.29E+00	3.64E-04	1.09E-03
Vanadium	1.44E+01	1.52E+01	1.21E-02	1.28E-02
Zinc	4.34E+02	8.15E+02	3.66E-01	6.88E-01
LPAH	1.01E+00	5.01E+00	8.51E-04	4.23E-03
HPAH	3.32E+00	9.16E+00	2.80E-03	7.72E-03
TOTAL PAHs	4.33E+00	1.42E+01	3.65E-03	1.20E-02

TABLE C-6
INTAKE CALCULATIONS FOR SOIL SOUTH OF MARLIN
COYOTE

FOOD INGESTION						
Parameter	Definition			Value	Reference	
Intake	Intake of chemical (mg/kg-day)			calculated		
Cm	Mammal concentration (mg/kg)			see FoodConc page		
Cb	Bird concentration (mg/kg)			see FoodConc page		
IR	Ingestion rate of food (kg/day)			6.54E-01	EPA, 1993 (normalized for bw)	
Dfm	Dietary fraction of small mammals (unitless)			7.50E-01	EPA, 1993	
Dfb	Dietary fraction of birds (unitless)			2.50E-01	EPA, 1993	
AUF	Area Use Factor			1	EPA, 1997	
BW	Body weight (kg)			1.55E+01	EPA, 1993	
Chemical	Average Mammal	RME Mammal	Average Bird	RME Bird	Average Intake	RME Intake
2-Methylnaphthalene	8.37E-05	4.09E-04	1.14E-04	5.55E-04	3.85E-06	1.88E-05
4,4'-DDD	2.45E-06	1.59E-05	5.05E-06	3.28E-05	1.31E-07	8.50E-07
4,4'-DDE	5.44E-07	1.73E-06	1.12E-06	3.56E-06	2.90E-08	9.22E-08
4,4'-DDT	1.18E-06	4.00E-06	2.44E-06	8.24E-06	6.32E-08	2.13E-07
Acenaphthene	5.03E-05	1.38E-04	6.81E-05	1.87E-04	2.31E-06	6.34E-06
Acenaphthylene	5.04E-05	1.37E-04	6.83E-05	1.85E-04	2.31E-06	6.28E-06
Anthracene	1.05E-04	2.52E-04	1.42E-04	3.42E-04	4.82E-06	1.16E-05
Antimony	1.24E-04	1.91E-04	1.24E-04	1.91E-04	5.23E-06	8.06E-06
Aroclor-1254	6.18E-05	2.23E-04	1.22E-04	4.42E-04	3.24E-06	1.17E-05
Arsenic	1.53E-04	2.27E-04	1.53E-04	2.27E-04	6.47E-06	9.55E-06
Barium	3.25E-03	4.53E-03	3.25E-03	4.53E-03	1.37E-04	1.91E-04
Benzo(a)anthracene	4.36E-05	1.40E-04	5.89E-05	1.89E-04	2.00E-06	6.41E-06
Benzo(a)pyrene	8.80E-05	2.56E-04	1.74E-04	5.05E-04	4.62E-06	1.34E-05
Benzo(b)fluoranthene	1.40E-04	3.77E-04	2.76E-04	7.43E-04	7.33E-06	1.97E-05
Benzo(g,h,i)perylene	3.01E-04	6.54E-04	4.08E-04	8.86E-04	1.38E-05	3.00E-05
Benzo(k)fluoranthene	4.69E-05	1.13E-04	9.24E-05	2.22E-04	2.46E-06	5.92E-06
Boron	9.62E+00	1.48E+01	9.62E+00	1.48E+01	4.06E-01	6.23E-01
Cadmium	8.83E-06	1.98E-05	6.25E-03	1.40E-02	6.62E-05	1.48E-04
Chromium	4.42E-04	5.80E-04	4.42E-04	5.80E-04	1.86E-05	2.45E-05
Chrysene	5.71E-05	1.64E-04	8.03E-05	2.30E-04	2.65E-06	7.61E-06
Cobalt	4.45E-01	4.74E-01	4.45E-01	4.74E-01	1.88E-02	2.00E-02
Copper	1.10E+01	2.12E+01	1.10E+01	2.12E+01	4.63E-01	8.95E-01
Dibenz(a,h)anthracene	5.28E-05	1.10E-04	1.35E-04	2.83E-04	3.10E-06	6.46E-06
Dieldrin	9.01E-04	2.10E-03	9.01E-04	2.10E-03	3.80E-05	8.86E-05
Endrin Aldehyde	1.90E-03	5.50E-03	1.90E-03	5.50E-03	8.01E-05	2.32E-04
Endrin Ketone	1.30E-03	2.90E-03	1.30E-03	2.90E-03	5.48E-05	1.22E-04
Fluoranthene	7.13E-04	2.26E-03	9.66E-04	3.07E-03	3.27E-05	1.04E-04
Fluorene	5.30E-05	1.28E-04	7.19E-05	1.74E-04	2.44E-06	5.90E-06
gamma-Chlordane	6.91E-04	1.70E-03	6.91E-04	1.70E-03	2.91E-05	7.17E-05
Indeno(1,2,3-cd)pyrene	2.88E-04	5.95E-04	9.58E-04	1.98E-03	1.92E-05	3.97E-05
Lead	4.57E-04	8.87E-04	4.57E-04	8.87E-04	1.93E-05	3.74E-05
Lithium	2.01E+01	2.43E+01	2.01E+01	2.43E+01	8.46E-01	1.03E+00
Manganese	2.82E+02	2.99E+02	2.82E+02	2.99E+02	1.19E+01	1.26E+01
Mercury	1.71E-06	4.68E-06	7.05E-06	1.93E-05	1.28E-07	3.52E-07
Molybdenum	2.91E-05	5.26E-05	2.91E-05	5.26E-05	1.23E-06	2.22E-06
Naphthalene	3.87E-04	3.33E-03	5.25E-04	4.51E-03	1.78E-05	1.53E-04
Nickel	1.45E-03	1.53E-03	1.45E-03	1.53E-03	6.13E-05	6.46E-05
Phenanthrene	4.81E-04	1.62E-03	6.52E-04	2.19E-03	2.21E-05	7.43E-05
Pyrene	5.18E-04	1.55E-03	7.03E-04	2.10E-03	2.38E-05	7.11E-05
Vanadium	4.70E-04	4.95E-04	4.70E-04	4.95E-04	1.98E-05	2.09E-05
Zinc	5.60E-05	1.05E-04	5.42E-02	1.02E-01	5.74E-04	1.08E-03
LPAH	1.21E-03	6.01E-03	1.64E-03	8.15E-03	5.56E-05	2.76E-04
HPAH	3.99E-03	1.10E-02	5.40E-03	1.49E-02	1.83E-04	5.05E-04
TOTAL PAHs	5.15E-03	1.68E-02	7.02E-03	2.30E-02	2.37E-04	7.75E-04

TABLE C-6
INTAKE CALCULATIONS FOR SOIL SOUTH OF MARLIN
COYOTE

Chemical	TOTAL Average Intake	TOTAL RME Intake
TOTAL INTAKE		
INTAKE = Soil Intake + Food Intake		
2-Methylnaphthalene	6.27E-05	3.06E-04
4,4-DDD	6.59E-06	4.29E-05
4,4'-DDE	1.46E-06	4.65E-06
4,4'-DDT	3.18E-06	1.08E-05
Acenaphthene	3.77E-05	1.03E-04
Acenaphthylene	3.77E-05	1.02E-04
Anthracene	7.85E-05	1.89E-04
Antimony	8.68E-04	1.34E-03
Aroclor-1254	1.76E-04	6.36E-04
Arsenic	2.82E-03	4.16E-03
Barium	2.00E-01	2.79E-01
Benzo(a)anthracene	2.28E-04	7.31E-04
Benzo(a)pyrene	2.97E-04	8.64E-04
Benzo(b)fluoranthene	4.00E-04	1.08E-03
Benzo(g,h,i)perylene	2.26E-04	4.90E-04
Benzo(k)fluoranthene	1.35E-04	3.25E-04
Boron	4.10E-01	6.29E-01
Cadmium	3.49E-04	7.82E-04
Chromium	1.14E-02	1.50E-02
Chrysene	2.78E-04	7.99E-04
Cobalt	2.23E-02	2.37E-02
Copper	4.83E-01	9.35E-01
Dibenz(a,h)anthracene	9.84E-05	2.06E-04
Dieldrin	3.88E-05	9.04E-05
Endrin Aldehyde	8.17E-05	2.37E-04
Endrin Ketone	5.59E-05	1.25E-04
Fluoranthene	5.34E-04	1.69E-03
Fluorene	3.97E-05	9.62E-05
gamma-Chlordane	2.97E-05	7.32E-05
Indeno(1,2,3-cd)pyrene	3.30E-04	6.82E-04
Lead	4.52E-02	8.78E-02
Lithium	8.55E-01	1.04E+00
Manganese	1.21E+01	1.29E+01
Mercury	2.22E-05	6.09E-05
Molybdenum	7.52E-04	1.36E-03
Naphthalene	2.90E-04	2.49E-03
Nickel	9.96E-03	1.05E-02
Phenanthrene	3.60E-04	1.21E-03
Pyrene	3.88E-04	1.16E-03
Vanadium	1.22E-02	1.28E-02
Zinc	3.67E-01	6.89E-01
LPAH	9.07E-04	4.50E-03
HPAH	2.99E-03	8.23E-03
TOTAL PAHs	3.89E-03	1.27E-02

TABLE C-7
INTAKE CALCULATIONS FOR SOIL SOUTH OF MARLIN
LEAST SHREW

SOIL INGESTION				
Parameter	Definition	Value	Reference	
Intake	Intake of chemical (mg/kg-day)	calculated		
Sc	Soil concentration (mg/kg)	see data page		
IR	Ingestion rate of soil (kg/day)	1.09E-04	EPA, 2009 (normalized for bw)	
AF	Chemical Bioavailability in soil (unitless)	1	EPA, 1997	
AUF	Area Use Factor	1	EPA, 1997	
BW	Body weight (kg)	4.00E-03	Davis and Schmidly, 2009	
Chemical	Average Sc	RME Sc	Average Intake	RME Intake
2-Methylnaphthalene	6.98E-02	3.41E-01	1.90E-03	9.28E-03
4,4-DDD	7.66E-03	4.98E-02	2.08E-04	1.35E-03
4,4'-DDE	1.70E-03	5.40E-03	4.62E-05	1.47E-04
4,4'-DDT	3.70E-03	1.25E-02	1.01E-04	3.40E-04
Acenaphthene	4.19E-02	1.15E-01	1.14E-03	3.13E-03
Acenaphthylene	4.20E-02	1.14E-01	1.14E-03	3.10E-03
Anthracene	8.74E-02	2.10E-01	2.38E-03	5.71E-03
Antimony	1.02E+00	1.58E+00	2.78E-02	4.29E-02
Aroclor-1254	2.05E-01	7.40E-01	5.58E-03	2.01E-02
Arsenic	3.33E+00	4.92E+00	9.06E-02	1.34E-01
Barium	2.37E+02	3.30E+02	6.46E+00	8.99E+00
Benzo(a)anthracene	2.68E-01	8.59E-01	7.29E-03	2.34E-02
Benzo(a)pyrene	3.47E-01	1.01E+00	9.44E-03	2.74E-02
Benzo(b)fluoranthene	4.66E-01	1.26E+00	1.27E-02	3.42E-02
Benzo(g,h,i)perylene	2.51E-01	5.45E-01	6.83E-03	1.48E-02
Benzo(k)fluoranthene	1.57E-01	3.78E-01	4.27E-03	1.03E-02
Boron	4.81E+00	7.39E+00	1.31E-01	2.01E-01
Cadmium	3.35E-01	7.51E-01	9.11E-03	2.04E-02
Chromium	1.35E+01	1.78E+01	3.68E-01	4.83E-01
Chrysene	3.27E-01	9.38E-01	8.89E-03	2.55E-02
Cobalt	4.14E+00	4.41E+00	1.13E-01	1.20E-01
Copper	2.43E+01	4.69E+01	6.60E-01	1.28E+00
Dibenz(a,h)anthracene	1.13E-01	2.36E-01	3.07E-03	6.42E-03
Dieldrin	9.01E-04	2.10E-03	2.45E-05	5.71E-05
Endrin Aldehyde	1.90E-03	5.50E-03	5.17E-05	1.50E-04
Endrin Ketone	1.30E-03	2.90E-03	3.54E-05	7.89E-05
Fluoranthene	5.94E-01	1.89E+00	1.62E-02	5.13E-02
Fluorene	4.42E-02	1.07E-01	1.20E-03	2.91E-03
gamma-Chlordane	6.90E-04	1.70E-03	1.88E-05	4.62E-05
Indeno(1,2,3-cd)pyrene	3.68E-01	7.61E-01	1.00E-02	2.07E-02
Lead	5.35E+01	1.04E+02	1.46E+00	2.83E+00
Lithium	1.00E+01	1.22E+01	2.73E-01	3.31E-01
Manganese	2.61E+02	2.78E+02	7.10E+00	7.55E+00
Mercury	2.62E-02	7.18E-02	7.13E-04	1.95E-03
Molybdenum	8.90E-01	1.61E+00	2.42E-02	4.38E-02
Naphthalene	3.23E-01	2.78E+00	8.79E-03	7.55E-02
Nickel	1.17E+01	1.24E+01	3.19E-01	3.36E-01
Phenanthrene	4.01E-01	1.35E+00	1.09E-02	3.67E-02
Pyrene	4.32E-01	1.29E+00	1.18E-02	3.51E-02
Vanadium	1.44E+01	1.52E+01	3.92E-01	4.13E-01
Zinc	4.34E+02	8.15E+02	1.18E+01	2.22E+01
LPAH	1.01E+00	5.01E+00	2.75E-02	1.36E-01
HPAH	3.32E+00	9.16E+00	9.04E-02	2.49E-01
TOTAL PAHs	4.33E+00	1.42E+01	1.18E-01	3.85E-01

TABLE C-7
INTAKE CALCULATIONS FOR SOIL SOUTH OF MARLIN
LEAST SHREW

FOOD INGESTION						
INTAKE = ((Ca * IR * DFA * AUF) / (BW) + ((Cp * IR * DfS * AUF)/(BW))						
Parameter	Definition				Value	Reference
Intake	Intake of chemical (mg/kg-day)		calculated			
Ca	Arthropod concentration (mg/kg)		see FoodConc page			
Cp	Plant concentration (mg/kg)		see FoodConc page			
IR	Ingestion rate of of food (kg/day)		1.36E-03		EPA, 1993 (normalized for bw)	
Dfa	Dietary fraction of arthropods (unitless)		9.00E-01		EPA, 2009	
DfS	Dietary fraction of plants, seeds and other vegetation (unitless)		1.00E-01		EPA, 2009	
AUF	Area Use Factor		1		EPA, 1997	
BW	Body weight (kg)		4.00E-03		Davis and Schmidly, 2009	
Chemical	Average Arthropod	RME Arthropod	Average Plant	RME Plant	Average Intake	RME Intake
2-Methylnaphthalene	4.89E-03	2.39E-02	1.41E-03	6.89E-03	1.54E-03	7.54E-03
4,4-DDD	9.65E-03	6.27E-02	7.18E-05	4.67E-04	2.96E-03	1.92E-02
4,4'-DDE	2.14E-03	6.80E-03	1.59E-05	5.06E-05	6.56E-04	2.08E-03
4,4'-DDT	4.66E-03	1.58E-02	3.47E-05	1.17E-04	1.43E-03	4.82E-03
Acenaphthene	2.93E-03	8.05E-03	8.46E-04	2.32E-03	9.26E-04	2.54E-03
Acenaphthylene	2.94E-03	7.98E-03	8.48E-04	2.30E-03	9.28E-04	2.52E-03
Anthracene	6.12E-03	1.47E-02	1.77E-03	4.24E-03	1.93E-03	4.64E-03
Antimony	2.25E-01	3.47E-01	2.05E-01	3.15E-01	7.58E-02	1.17E-01
Aroclor-1254	2.32E-01	8.36E-01	2.05E-03	7.40E-03	7.10E-02	2.56E-01
Arsenic	3.66E-01	5.41E-01	1.20E-01	1.77E-01	1.16E-01	1.71E-01
Barium	5.22E+01	7.27E+01	3.56E+01	4.96E+01	1.72E+01	2.39E+01
Benzo(a)anthracene	8.04E-03	2.58E-02	5.41E-03	1.74E-02	2.64E-03	8.48E-03
Benzo(a)pyrene	2.43E-02	7.06E-02	3.50E-03	1.02E-02	7.55E-03	2.19E-02
Benzo(b)fluoranthene	3.26E-02	8.79E-02	4.71E-03	1.27E-02	1.01E-02	2.73E-02
Benzo(g,h,i)perylene	1.76E-02	3.82E-02	5.07E-03	1.10E-02	5.55E-03	1.20E-02
Benzo(k)fluoranthene	1.26E-02	3.02E-02	1.59E-03	3.82E-03	3.90E-03	9.38E-03
Boron	4.81E+00	7.39E+00	4.81E+00	7.39E+00	1.64E+00	2.51E+00
Cadmium	3.22E-01	7.21E-01	1.22E-01	2.73E-01	1.03E-01	2.30E-01
Chromium	1.35E-01	1.78E-01	1.01E-01	1.33E-01	4.49E-02	5.88E-02
Chrysene	1.31E-02	3.75E-02	6.11E-03	1.75E-02	4.21E-03	1.21E-02
Cobalt	4.14E+00	4.41E+00	3.09E-02	3.28E-02	1.27E+00	1.35E+00
Copper	9.70E-01	1.88E+00	9.70E+00	1.88E+01	6.27E-01	1.21E+00
Dibenz(a,h)anthracene	7.91E-03	1.65E-02	7.23E-04	1.51E-03	2.45E-03	5.11E-03
Dieldrin	1.32E-02	3.09E-02	3.14E-05	7.33E-05	4.05E-03	9.45E-03
Endrin Aldehyde	1.90E-03	5.50E-03	1.09E-04	3.17E-04	5.85E-04	1.69E-03
Endrin Ketone	1.30E-03	2.90E-03	7.49E-05	1.67E-04	4.00E-04	8.93E-04
Fluoranthene	4.16E-02	1.32E-01	1.20E-02	3.81E-02	1.31E-02	4.17E-02
Fluorene	3.09E-03	7.49E-03	8.93E-04	2.16E-03	9.77E-04	2.37E-03
gamma-Chlordane	6.90E-04	1.70E-03	9.87E-06	2.43E-05	2.12E-04	5.21E-04
Indeno(1,2,3-cd)pyrene	2.94E-02	6.09E-02	1.44E-03	2.97E-03	9.06E-03	1.87E-02
Lead	1.61E+00	3.12E+00	2.41E+00	4.68E+00	5.73E-01	1.11E+00
Lithium	1.00E+01	1.22E+01	1.00E+01	1.22E+01	3.41E+00	4.14E+00
Manganese	1.58E+01	1.68E+01	2.07E+01	2.20E+01	5.54E+00	5.88E+00
Mercury	2.23E-01	6.10E-01	3.59E-03	9.84E-03	6.83E-02	1.87E-01
Molybdenum	8.90E-03	1.61E-02	6.68E-03	1.21E-02	2.95E-03	5.34E-03
Naphthalene	2.26E-02	1.94E-01	6.52E-03	5.61E-02	7.14E-03	6.13E-02
Nickel	2.35E-01	2.47E-01	3.76E-01	3.96E-01	8.46E-02	8.92E-02
Phenanthrene	2.81E-02	9.44E-02	8.10E-03	2.72E-02	8.86E-03	2.98E-02
Pyrene	3.02E-02	9.03E-02	8.73E-03	2.61E-02	9.55E-03	2.85E-02
Vanadium	1.44E-01	1.52E-01	1.08E-01	1.14E-01	4.77E-02	5.03E-02
Zinc	2.43E+02	4.57E+02	5.21E-10	9.78E-10	7.43E+01	1.40E+02
LPAH	7.07E-02	3.51E-01	2.04E-02	1.01E-01	2.23E-02	1.11E-01
HPAH	2.33E-01	6.41E-01	6.71E-02	1.85E-01	7.35E-02	2.02E-01
TOTAL PAHs	3.03E-01	9.92E-01	8.66E-02	2.83E-01	9.57E-02	3.13E-01

TABLE C-7
INTAKE CALCULATIONS FOR SOIL SOUTH OF MARLIN
LEAST SHREW

TOTAL INTAKE	TOTAL Average Intake	TOTAL RME Intake
INTAKE = Soil Intake + Food Intake		
Chemical		
2-Methylnaphthalene	3.44E-03	1.68E-02
4,4-DDD	3.16E-03	2.06E-02
4,4'-DDE	7.02E-04	2.23E-03
4,4'-DDT	1.53E-03	5.16E-03
Acenaphthene	2.07E-03	5.67E-03
Acenaphthylene	2.07E-03	5.62E-03
Anthracene	4.31E-03	1.04E-02
Antimony	1.04E-01	1.60E-01
Aroclor-1254	7.65E-02	2.76E-01
Arsenic	2.07E-01	3.05E-01
Barium	2.36E+01	3.29E+01
Benzo(a)anthracene	9.93E-03	3.18E-02
Benzo(a)pyrene	1.70E-02	4.94E-02
Benzo(b)fluoranthene	2.28E-02	6.15E-02
Benzo(g,h,i)perylene	1.24E-02	2.69E-02
Benzo(k)fluoranthene	8.17E-03	1.97E-02
Boron	1.77E+00	2.71E+00
Cadmium	1.12E-01	2.50E-01
Chromium	4.13E-01	5.42E-01
Chrysene	1.31E-02	3.76E-02
Cobalt	1.38E+00	1.47E+00
Copper	1.29E+00	2.49E+00
Dibenz(a,h)anthracene	5.52E-03	1.15E-02
Dieldrin	4.08E-03	9.51E-03
Endrin Aldehyde	6.37E-04	1.84E-03
Endrin Ketone	4.36E-04	9.72E-04
Fluoranthene	2.93E-02	9.30E-02
Fluorene	2.18E-03	5.28E-03
gamma-Chlordane	2.30E-04	5.67E-04
Indeno(1,2,3-cd)pyrene	1.91E-02	3.94E-02
Lead	2.03E+00	3.94E+00
Lithium	3.68E+00	4.47E+00
Manganese	1.26E+01	1.34E+01
Mercury	6.90E-02	1.89E-01
Molybdenum	2.72E-02	4.91E-02
Naphthalene	1.59E-02	1.37E-01
Nickel	4.04E-01	4.26E-01
Phenanthrene	1.98E-02	6.65E-02
Pyrene	2.13E-02	6.36E-02
Vanadium	4.39E-01	4.63E-01
Zinc	8.61E+01	1.62E+02
LPAH	4.98E-02	2.47E-01
HPAH	1.64E-01	4.52E-01
TOTAL PAHs	2.14E-01	6.99E-01

Notes:

* Soil ingestion was assumed to be 8% of dietary intake per EPA, 2009.

TABLE C-8
INTAKE CALCULATIONS FOR SOIL SOUTH OF MARLIN
AMERICAN ROBIN

SOIL INGESTION				
Parameter	Definition	Value	Reference	
Intake	Intake of chemical (mg/kg-day)	calculated		
Sc	Soil concentration (mg/kg)	see data page		
IR	Ingestion rate of soil (kg/day)	8.58E-04	EPA, 2009 (normalized for bw)	
AF	Chemical Bioavailability in soil (unitless)	1	EPA, 1997	
AUF	Area Use Factor	1	EPA, 1997	
BW	Body weight (kg)	8.00E-02	EPA, 1999	
Chemical	Average Sc	RME Sc	Average Intake	RME Intake
2-Methylnaphthalene	2.93E-02	7.84E-02	3.14E-04	8.41E-04
4,4-DDD	7.89E-04	2.90E-03	8.47E-06	3.11E-05
4,4'-DDE	1.90E-03	7.40E-03	2.04E-05	7.94E-05
4,4'-DDT	3.80E-03	1.40E-02	4.08E-05	1.50E-04
Acenaphthene	5.95E-02	1.97E-01	6.38E-04	2.11E-03
Acenaphthylene	3.82E-02	1.13E-01	4.10E-04	1.21E-03
Anthracene	9.61E-02	2.97E-01	1.03E-03	3.19E-03
Antimony	1.12E+00	1.96E+00	1.20E-02	2.10E-02
Aroclor-1254	1.37E-01	7.26E-01	1.47E-03	7.79E-03
Arsenic	3.74E+00	4.54E+00	4.01E-02	4.86E-02
Barium	3.45E+02	4.15E+02	3.70E+00	4.45E+00
Benzo(a)anthracene	3.45E-01	1.21E+00	3.70E-03	1.30E-02
Benzo(a)pyrene	4.57E-01	1.46E+00	4.90E-03	1.56E-02
Benzo(b)fluoranthene	5.82E-01	1.64E+00	6.24E-03	1.76E-02
Benzo(g,h,i)perylene	3.24E-01	1.10E+00	3.48E-03	1.17E-02
Benzo(k)fluoranthene	2.40E-01	6.51E-01	2.57E-03	6.98E-03
Boron	4.66E+00	9.66E+00	5.00E-02	1.04E-01
Cadmium	4.64E-01	1.71E+00	4.98E-03	1.83E-02
Chromium	1.61E+01	1.75E+01	1.72E-01	1.87E-01
Chrysene	4.09E-01	1.32E+00	4.39E-03	1.42E-02
Cobalt	3.71E+00	4.78E+00	3.97E-02	5.13E-02
Copper	2.80E+01	3.25E+01	3.00E-01	3.48E-01
Dibenz(a,h)anthracene	1.55E-01	3.63E-01	1.66E-03	3.89E-03
Dieldrin	9.97E-04	3.00E-03	1.07E-05	3.22E-05
Endrin Aldehyde	2.30E-03	8.40E-03	2.47E-05	9.01E-05
Endrin Ketone	1.60E-03	4.00E-03	1.72E-05	4.29E-05
Fluoranthene	7.99E-01	2.66E+00	8.57E-03	2.85E-02
Fluorene	5.15E-02	1.55E-01	5.52E-04	1.66E-03
gamma-Chlordane	8.27E-04	2.50E-03	8.87E-06	2.68E-05
Indeno(1,2,3-cd)pyrene	4.70E-01	1.12E+00	5.04E-03	1.20E-02
Lead	6.96E+01	8.45E+01	7.47E-01	9.06E-01
Lithium	7.86E+00	9.06E+00	8.43E-02	9.71E-02
Manganese	2.57E+02	2.81E+02	2.76E+00	3.01E+00
Mercury	2.27E-02	2.54E-02	2.43E-04	2.72E-04
Molybdenum	1.31E+00	1.65E+00	1.40E-02	1.76E-02
Naphthalene	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nickel	1.16E+01	1.25E+01	1.25E-01	1.34E-01
Phenanthrene	5.12E-01	2.20E+00	5.49E-03	2.36E-02
Pyrene	5.33E-01	1.37E+00	5.72E-03	1.47E-02
Vanadium	1.38E+01	1.48E+01	1.48E-01	1.59E-01
Zinc	6.01E+02	7.28E+02	6.45E+00	7.81E+00
LPAH	7.87E-01	3.04E+00	8.44E-03	3.26E-02
HPAH	4.31E+00	1.29E+01	4.63E-02	1.38E-01
TOTAL PAHs	5.10E+00	1.59E+01	5.47E-02	1.71E-01

TABLE C-8
INTAKE CALCULATIONS FOR SOIL SOUTH OF MARLIN
AMERICAN ROBIN

FOOD INGESTION								
Parameter	Definition						Value	Reference
Intake	Intake of chemical (mg/kg-day)						calculated	
Ce	Earthworm concentration (mg/kg)				see FoodConc page			
Ca	Arthropod concentration (mg/kg)				see FoodConc page			
Cp	Plant concentration (mg/kg)				see FoodConc page			
IR	Ingestion rate of food (kg/day)				1.65E-02		EPA, 1999 (normalized for bw)	
Dfe	Dietary fraction of earthworms (unitless)				4.60E-01		EPA, 1993	
Dfa	Dietary fraction of arthropods (unitless)				4.60E-01		EPA, 1993	
Dfs	Dietary fraction of plants, seeds and other vegetation (unitless)				8.00E-02		EPA, 1993	
AUF	Area Use Factor				1		EPA, 1997	
BW	Body weight (kg)				8.00E-02		EPA, 1999	
Chemical	Average Earthworm	RME Earthworm	Average Arthropod	RME Arthropod	Average Plant	RME Plant	Average Intake	RME Intake
2-Methylnaphthalene	4.89E-03	2.39E-02	4.89E-03	2.39E-02	1.41E-03	6.89E-03	9.50E-04	4.64E-03
4,4-DDD	9.65E-03	6.27E-02	9.65E-03	6.27E-02	7.18E-05	4.67E-04	1.83E-03	1.19E-02
4,4'-DDE	2.14E-03	6.80E-03	2.14E-03	6.80E-03	1.59E-05	5.06E-05	4.07E-04	1.29E-03
4,4'-DDT	4.66E-03	1.58E-02	4.66E-03	1.58E-02	3.47E-05	1.17E-04	8.85E-04	2.99E-03
Acenaphthene	2.93E-03	8.05E-03	2.93E-03	8.05E-03	8.46E-04	2.32E-03	5.71E-04	1.57E-03
Acenaphthylene	2.94E-03	7.98E-03	2.94E-03	7.98E-03	8.48E-04	2.30E-03	5.72E-04	1.55E-03
Anthracene	6.12E-03	1.47E-02	6.12E-03	1.47E-02	1.77E-03	4.24E-03	1.19E-03	2.86E-03
Antimony	2.25E-01	3.47E-01	2.25E-01	3.47E-01	2.05E-01	3.15E-01	4.61E-02	7.10E-02
Aroclor-1254	2.32E-01	8.36E-01	2.32E-01	8.36E-01	2.05E-03	7.40E-03	4.40E-02	1.59E-01
Arsenic	3.66E-01	5.41E-01	3.66E-01	5.41E-01	1.20E-01	1.77E-01	7.15E-02	1.06E-01
Barium	5.22E+01	7.27E+01	5.22E+01	7.27E+01	3.56E+01	4.96E+01	1.05E+01	1.46E+01
Benzo(a)anthracene	8.04E-03	2.58E-02	8.04E-03	2.58E-02	5.41E-03	1.74E-02	1.62E-03	5.18E-03
Benzo(a)pyrene	2.43E-02	7.06E-02	2.43E-02	7.06E-02	3.50E-03	1.02E-02	4.67E-03	1.36E-02
Benzo(b)fluoranthene	3.26E-02	8.79E-02	3.26E-02	8.79E-02	4.71E-03	1.27E-02	6.27E-03	1.69E-02
Benzo(g,h,i)perylene	1.76E-02	3.82E-02	1.76E-02	3.82E-02	5.07E-03	1.10E-02	3.42E-03	7.42E-03
Benzo(k)fluoranthene	1.26E-02	3.02E-02	1.26E-02	3.02E-02	1.59E-03	3.82E-03	2.41E-03	5.80E-03
Boron	4.81E+00	7.39E+00	4.81E+00	7.39E+00	4.81E+00	7.39E+00	9.92E-01	1.52E+00
Cadmium	3.22E-01	7.21E-01	3.22E-01	7.21E-01	1.22E-01	2.73E-01	6.30E-02	1.41E-01
Chromium	1.35E-01	1.78E-01	1.35E-01	1.78E-01	1.01E-01	1.33E-01	2.73E-02	3.59E-02
Chrysene	1.31E-02	3.75E-02	1.31E-02	3.75E-02	6.11E-03	1.75E-02	2.58E-03	7.41E-03
Cobalt	4.14E+00	4.41E+00	4.14E+00	4.41E+00	3.09E-02	3.28E-02	7.87E-01	8.37E-01
Copper	9.70E-01	1.88E+00	9.70E-01	1.88E+00	9.70E+00	1.88E+01	3.44E-01	6.66E-01
Dibenz(a,h)anthracene	7.91E-03	1.65E-02	7.91E-03	1.65E-02	7.23E-04	1.51E-03	1.51E-03	3.16E-03
Dieldrin	1.32E-02	3.09E-02	1.32E-02	3.09E-02	3.14E-05	7.33E-05	2.51E-03	5.86E-03
Endrin Aldehyde	1.90E-03	5.50E-03	1.90E-03	5.50E-03	1.09E-04	3.17E-04	3.62E-04	1.05E-03
Endrin Ketone	1.30E-03	2.90E-03	1.30E-03	2.90E-03	7.49E-05	1.67E-04	2.48E-04	5.53E-04
Fluoranthene	4.16E-02	1.32E-01	4.16E-02	1.32E-01	1.20E-02	3.81E-02	8.09E-03	2.57E-02
Fluorene	3.09E-03	7.49E-03	3.09E-03	7.49E-03	8.93E-04	2.16E-03	6.02E-04	1.46E-03
gamma-Chlordane	6.90E-04	1.70E-03	6.90E-04	1.70E-03	9.87E-06	2.43E-05	1.31E-04	3.23E-04
Indeno(1,2,3-cd)pyrene	2.94E-02	6.09E-02	2.94E-02	6.09E-02	1.44E-03	2.97E-03	5.61E-03	1.16E-02
Lead	1.61E+00	3.12E+00	1.61E+00	3.12E+00	2.41E+00	4.68E+00	3.44E-01	6.69E-01
Lithium	1.00E+01	1.22E+01	1.00E+01	1.22E+01	1.00E+01	1.22E+01	2.07E+00	2.51E+00
Manganese	1.58E+01	1.68E+01	1.58E+01	1.68E+01	2.07E+01	2.20E+01	3.34E+00	3.55E+00
Mercury	2.23E-01	6.10E-01	2.23E-01	6.10E-01	3.59E-03	9.84E-03	4.23E-02	1.16E-01
Molybdenum	8.90E-03	1.61E-02	8.90E-03	1.61E-02	6.68E-03	1.21E-02	1.80E-03	3.25E-03
Naphthalene	2.26E-02	1.94E-01	2.26E-02	1.94E-01	6.52E-03	5.61E-02	4.40E-03	3.78E-02
Nickel	2.35E-01	2.47E-01	2.35E-01	2.47E-01	3.76E-01	3.96E-01	5.08E-02	5.35E-02
Phenanthrene	2.81E-02	9.44E-02	2.81E-02	9.44E-02	8.10E-03	2.72E-02	5.46E-03	1.84E-02
Pyrene	3.02E-02	9.03E-02	3.02E-02	9.03E-02	8.73E-03	2.61E-02	5.88E-03	1.76E-02
Vanadium	1.44E-01	1.52E-01	1.44E-01	1.52E-01	1.08E-01	1.14E-01	2.91E-02	3.07E-02
Zinc	2.43E+02	4.57E+02	2.43E+02	4.57E+02	5.21E-10	9.78E-10	4.61E+01	8.66E+01
LPAH	7.07E-02	3.51E-01	7.07E-02	3.51E-01	2.04E-02	1.01E-01	1.37E-02	6.82E-02
HPAH	2.33E-01	6.41E-01	2.33E-01	6.41E-01	6.71E-02	1.85E-01	4.52E-02	1.25E-01
TOTAL PAHs	3.03E-01	9.92E-01	3.03E-01	9.92E-01	8.66E-02	2.83E-01	5.90E-02	1.93E-01

TABLE C-8
INTAKE CALCULATIONS FOR SOIL SOUTH OF MARLIN
AMERICAN ROBIN

Chemical	TOTAL Average Intake	TOTAL RME Intake
TOTAL INTAKE		
INTAKE = Soil Intake + Food Intake		
2-Methylnaphthalene	1.26E-03	5.48E-03
4,4-DDD	1.84E-03	1.19E-02
4,4'-DDE	4.27E-04	1.37E-03
4,4'-DDT	9.26E-04	3.14E-03
Acenaphthene	1.21E-03	3.68E-03
Acenaphthylene	9.82E-04	2.76E-03
Anthracene	2.22E-03	6.04E-03
Antimony	5.81E-02	9.20E-02
Aroclor-1254	4.55E-02	1.67E-01
Arsenic	1.12E-01	1.54E-01
Barium	1.42E+01	1.91E+01
Benzo(a)anthracene	5.32E-03	1.82E-02
Benzo(a)pyrene	9.57E-03	2.92E-02
Benzo(b)fluoranthene	1.25E-02	3.45E-02
Benzo(g,h,i)perylene	6.89E-03	1.92E-02
Benzo(k)fluoranthene	4.98E-03	1.28E-02
Boron	1.04E+00	1.63E+00
Cadmium	6.80E-02	1.60E-01
Chromium	2.00E-01	2.23E-01
Chrysene	6.97E-03	2.16E-02
Cobalt	8.27E-01	8.88E-01
Copper	6.44E-01	1.01E+00
Dibenz(a,h)anthracene	3.18E-03	7.05E-03
Dieldrin	2.52E-03	5.89E-03
Endrin Aldehyde	3.87E-04	1.14E-03
Endrin Ketone	2.65E-04	5.96E-04
Fluoranthene	1.67E-02	5.42E-02
Fluorene	1.15E-03	3.12E-03
gamma-Chlordane	1.40E-04	3.50E-04
Indeno(1,2,3-cd)pyrene	1.07E-02	2.36E-02
Lead	1.09E+00	1.58E+00
Lithium	2.15E+00	2.61E+00
Manganese	6.10E+00	6.56E+00
Mercury	4.26E-02	1.16E-01
Molybdenum	1.58E-02	2.09E-02
Naphthalene	4.40E-03	3.78E-02
Nickel	1.76E-01	1.88E-01
Phenanthrene	1.10E-02	4.19E-02
Pyrene	1.16E-02	3.22E-02
Vanadium	1.77E-01	1.90E-01
Zinc	5.25E+01	9.44E+01
LPAH	2.22E-02	1.01E-01
HPAH	9.15E-02	2.63E-01
TOTAL PAHs	1.14E-01	3.64E-01

TABLE C-9
INTAKE CALCULATIONS FOR SOIL SOUTH OF MARLIN
RED-TAILED HAWK

SOIL INGESTION				
INTAKE = (Sc * IR * AF * AUF) / (BW)				
Parameter	Definition		Value	Reference
Intake	Intake of chemical (mg/kg-day)	calculated		
Sc	Soil concentration (mg/kg)	see data page		
IR	Ingestion rate of soil (kg/day)	1.13E-03	EPA, 2009 (normalized for bw)	
AF	Chemical Bioavailability in soil (unitless)	1	EPA, 1997	
AUF	Area Use Factor	1	EPA, 1997	
BW	Body weight (kg)	9.60E-01	EPA, 1999	
Chemical	Average Sc	RME Sc	Average Intake	RME Intake
2-Methylnaphthalene	2.93E-02	3.41E-01	3.46E-05	4.03E-04
4,4-DDD	7.89E-04	4.98E-02	9.32E-07	5.88E-05
4,4'-DDE	1.90E-03	5.40E-03	2.24E-06	6.38E-06
4,4'-DDT	3.80E-03	1.25E-02	4.49E-06	1.48E-05
Acenaphthene	5.95E-02	1.15E-01	7.03E-05	1.36E-04
Acenaphthylene	3.82E-02	1.14E-01	4.51E-05	1.35E-04
Anthracene	9.61E-02	2.10E-01	1.13E-04	2.48E-04
Antimony	1.12E+00	1.58E+00	1.32E-03	1.86E-03
Aroclor-1254	1.37E-01	7.40E-01	1.62E-04	8.74E-04
Arsenic	3.74E+00	4.92E+00	4.41E-03	5.80E-03
Barium	3.45E+02	3.30E+02	4.08E-01	3.90E-01
Benzo(a)anthracene	3.45E-01	8.59E-01	4.07E-04	1.01E-03
Benzo(a)pyrene	4.57E-01	1.01E+00	5.40E-04	1.19E-03
Benzo(b)fluoranthene	5.82E-01	1.26E+00	6.87E-04	1.48E-03
Benzo(g,h,i)perylene	3.24E-01	5.45E-01	3.83E-04	6.43E-04
Benzo(k)fluoranthene	2.40E-01	3.78E-01	2.83E-04	4.46E-04
Boron	4.66E+00	7.39E+00	5.50E-03	8.72E-03
Cadmium	4.64E-01	7.51E-01	5.48E-04	8.87E-04
Chromium	1.61E+01	1.78E+01	1.90E-02	2.10E-02
Chrysene	4.09E-01	9.38E-01	4.83E-04	1.11E-03
Cobalt	3.71E+00	4.41E+00	4.37E-03	5.20E-03
Copper	2.80E+01	4.69E+01	3.30E-02	5.54E-02
Dibenz(a,h)anthracene	1.55E-01	2.36E-01	1.83E-04	2.79E-04
Dieldrin	9.97E-04	2.10E-03	1.18E-06	2.48E-06
Endrin Aldehyde	2.30E-03	5.50E-03	2.72E-06	6.49E-06
Endrin Ketone	1.60E-03	2.90E-03	1.89E-06	3.42E-06
Fluoranthene	7.99E-01	1.89E+00	9.43E-04	2.23E-03
Fluorene	5.15E-02	1.07E-01	6.08E-05	1.26E-04
gamma-Chlordane	8.27E-04	1.70E-03	9.76E-07	2.01E-06
Indeno(1,2,3-cd)pyrene	4.70E-01	7.61E-01	5.55E-04	8.99E-04
Lead	6.96E+01	1.04E+02	8.22E-02	1.23E-01
Lithium	7.86E+00	1.22E+01	9.28E-03	1.44E-02
Manganese	2.57E+02	2.78E+02	3.04E-01	3.28E-01
Mercury	2.27E-02	7.18E-02	2.68E-05	8.48E-05
Molybdenum	1.31E+00	1.61E+00	1.54E-03	1.90E-03
Naphthalene	3.23E-01	2.78E+00	3.81E-04	3.28E-03
Nickel	1.16E+01	1.24E+01	1.37E-02	1.46E-02
Phenanthrene	5.12E-01	1.35E+00	6.05E-04	1.59E-03
Pyrene	5.33E-01	1.29E+00	6.29E-04	1.52E-03
Vanadium	1.38E+01	1.52E+01	1.62E-02	1.79E-02
Zinc	6.01E+02	8.15E+02	7.10E-01	9.63E-01
LPAH	7.87E-01	5.01E+00	9.29E-04	5.92E-03
HPAH	4.31E+00	9.16E+00	5.09E-03	1.08E-02
TOTAL PAHs	5.10E+00	1.42E+01	6.02E-03	1.67E-02

TABLE C-9
INTAKE CALCULATIONS FOR SOIL SOUTH OF MARLIN
RED-TAILED HAWK

FOOD INGESTION						
Parameter	Definition				Value	Reference
Intake	Intake of chemical (mg/kg-day)				calculated	
Cm	Mammal concentration (mg/kg)		see FoodConc page			
Cb	Bird concentration (mg/kg)		see FoodConc page			
IR	Ingestion rate of food (kg/day)		5.67E-02		EPA, 1993 (normalized for bw)	
Dfm	Dietary fraction of small mammals (unitless)		7.85E-01		EPA, 1993	
Dfb	Dietary fraction of birds (unitless)		2.15E-01		EPA, 1993	
AUF	Area Use Factor		1		EPA, 1997	
BW	Body weight (kg)		9.60E-01		EPA, 1999	
Chemical	Average Mammal	RME Mammal	Average Bird	RME Bird	Average Intake	RME Intake
2-Methylnaphthalene	8.37E-05	4.09E-04	1.14E-04	5.55E-04	5.32E-06	2.60E-05
4,4-DDD	2.45E-06	1.59E-05	5.05E-06	3.28E-05	1.78E-07	1.16E-06
4,4'-DDE	5.44E-07	1.73E-06	1.12E-06	3.56E-06	3.94E-08	1.25E-07
4,4'-DDT	1.18E-06	4.00E-06	2.44E-06	8.24E-06	8.58E-08	2.90E-07
Acenaphthene	5.03E-05	1.38E-04	6.81E-05	1.87E-04	3.19E-06	8.77E-06
Acenaphthylene	5.04E-05	1.37E-04	6.83E-05	1.85E-04	3.20E-06	8.69E-06
Anthracene	1.05E-04	2.52E-04	1.42E-04	3.42E-04	6.66E-06	1.60E-05
Antimony	1.24E-04	1.91E-04	1.24E-04	1.91E-04	7.32E-06	1.13E-05
Aroclor-1254	6.18E-05	2.23E-04	1.22E-04	4.42E-04	4.42E-06	1.59E-05
Arsenic	1.53E-04	2.27E-04	1.53E-04	2.27E-04	9.06E-06	1.34E-05
Barium	3.25E-03	4.53E-03	3.25E-03	4.53E-03	1.92E-04	2.67E-04
Benzo(a)anthracene	4.36E-05	1.40E-04	5.89E-05	1.89E-04	2.77E-06	8.87E-06
Benzo(a)pyrene	8.80E-05	2.56E-04	1.74E-04	5.05E-04	6.29E-06	1.83E-05
Benzo(b)fluoranthene	1.40E-04	3.77E-04	2.76E-04	7.43E-04	9.97E-06	2.69E-05
Benzo(g,h,i)perylene	3.01E-04	6.54E-04	4.08E-04	8.86E-04	1.91E-05	4.15E-05
Benzo(k)fluoranthene	4.69E-05	1.13E-04	9.24E-05	2.22E-04	3.35E-06	8.06E-06
Boron	9.62E+00	1.48E+01	9.62E+00	1.48E+01	5.68E-01	8.72E-01
Cadmium	8.83E-06	1.98E-05	6.25E-03	1.40E-02	7.97E-05	1.79E-04
Chromium	4.42E-04	5.80E-04	4.42E-04	5.80E-04	2.61E-05	3.42E-05
Chrysene	5.71E-05	1.64E-04	8.03E-05	2.30E-04	3.66E-06	1.05E-05
Cobalt	4.45E-01	4.74E-01	4.45E-01	4.74E-01	2.63E-02	2.80E-02
Copper	1.10E+01	2.12E+01	1.10E+01	2.12E+01	6.48E-01	1.25E+00
Dibenz(a,h)anthracene	5.28E-05	1.10E-04	1.35E-04	2.83E-04	4.16E-06	8.69E-06
Dieldrin	9.01E-04	2.10E-03	9.01E-04	2.10E-03	5.32E-05	1.24E-04
Endrin Aldehyde	1.90E-03	5.50E-03	1.90E-03	5.50E-03	1.12E-04	3.25E-04
Endrin Ketone	1.30E-03	2.90E-03	1.30E-03	2.90E-03	7.68E-05	1.71E-04
Fluoranthene	7.13E-04	2.26E-03	9.66E-04	3.07E-03	4.53E-05	1.44E-04
Fluorene	5.30E-05	1.28E-04	7.19E-05	1.74E-04	3.37E-06	8.16E-06
gamma-Chlordane	6.91E-04	1.70E-03	6.91E-04	1.70E-03	4.08E-05	1.00E-04
Indeno(1,2,3-cd)pyrene	2.88E-04	5.95E-04	9.58E-04	1.98E-03	2.55E-05	5.27E-05
Lead	4.57E-04	8.87E-04	4.57E-04	8.87E-04	2.70E-05	5.24E-05
Lithium	2.01E+01	2.43E+01	2.01E+01	2.43E+01	1.18E+00	1.44E+00
Manganese	2.82E+02	2.99E+02	2.82E+02	2.99E+02	1.66E+01	1.77E+01
Mercury	1.71E-06	4.68E-06	7.05E-06	1.93E-05	1.69E-07	4.62E-07
Molybdenum	2.91E-05	5.26E-05	2.91E-05	5.26E-05	1.72E-06	3.10E-06
Naphthalene	3.87E-04	3.33E-03	5.25E-04	4.51E-03	2.46E-05	2.12E-04
Nickel	1.45E-03	1.53E-03	1.45E-03	1.53E-03	8.58E-05	9.04E-05
Phenanthrene	4.81E-04	1.62E-03	6.52E-04	2.19E-03	3.06E-05	1.03E-04
Pyrene	5.18E-04	1.55E-03	7.03E-04	2.10E-03	3.29E-05	9.83E-05
Vanadium	4.70E-04	4.95E-04	4.70E-04	4.95E-04	2.78E-05	2.92E-05
Zinc	5.60E-05	1.05E-04	5.42E-02	1.02E-01	6.91E-04	1.30E-03
LPAH	1.21E-03	6.01E-03	1.64E-03	8.15E-03	7.69E-05	3.82E-04
HPAH	3.99E-03	1.10E-02	5.40E-03	1.49E-02	2.53E-04	6.98E-04
TOTAL PAHs	5.15E-03	1.68E-02	7.02E-03	2.30E-02	3.28E-04	1.07E-03

TABLE C-9
INTAKE CALCULATIONS FOR SOIL SOUTH OF MARLIN
RED-TAILED HAWK

Chemical	TOTAL Average Intake	TOTAL RME Intake
TOTAL INTAKE		
INTAKE = Soil Intake + Food Intake		
2-Methylnaphthalene	3.99E-05	4.29E-04
4,4'-DDD	1.11E-06	6.00E-05
4,4'-DDE	2.28E-06	6.50E-06
4,4'-DDT	4.57E-06	1.50E-05
Acenaphthene	7.34E-05	1.45E-04
Acenaphthylene	4.83E-05	1.43E-04
Anthracene	1.20E-04	2.64E-04
Antimony	1.33E-03	1.87E-03
Aroclor-1254	1.66E-04	8.90E-04
Arsenic	4.42E-03	5.82E-03
Barium	4.08E-01	3.90E-01
Benzo(a)anthracene	4.10E-04	1.02E-03
Benzo(a)pyrene	5.46E-04	1.21E-03
Benzo(b)fluoranthene	6.97E-04	1.51E-03
Benzo(g,h,i)perylene	4.02E-04	6.85E-04
Benzo(k)fluoranthene	2.87E-04	4.54E-04
Boron	5.74E-01	8.81E-01
Cadmium	6.28E-04	1.07E-03
Chromium	1.90E-02	2.10E-02
Chrysene	4.87E-04	1.12E-03
Cobalt	3.07E-02	3.32E-02
Copper	6.81E-01	1.31E+00
Dibenz(a,h)anthracene	1.87E-04	2.87E-04
Dieldrin	5.44E-05	1.26E-04
Endrin Aldehyde	1.15E-04	3.31E-04
Endrin Ketone	7.86E-05	1.75E-04
Fluoranthene	9.89E-04	2.37E-03
Fluorene	6.42E-05	1.34E-04
gamma-Chlordane	4.17E-05	1.02E-04
Indeno(1,2,3-cd)pyrene	5.80E-04	9.51E-04
Lead	8.22E-02	1.23E-01
Lithium	1.19E+00	1.45E+00
Manganese	1.69E+01	1.80E+01
Mercury	2.70E-05	8.52E-05
Molybdenum	1.54E-03	1.90E-03
Naphthalene	4.06E-04	3.49E-03
Nickel	1.38E-02	1.47E-02
Phenanthrene	6.35E-04	1.70E-03
Pyrene	6.62E-04	1.62E-03
Vanadium	1.63E-02	1.79E-02
Zinc	7.11E-01	9.64E-01
LPAH	1.01E-03	6.30E-03
HPAH	5.35E-03	1.15E-02
TOTAL PAHs	6.35E-03	1.78E-02

TABLE C-10
ECOLOGICAL HAZARD QUOTIENT CALCULATIONS FOR SOIL SOUTH OF MARLIN
DEER MOUSE

Ecological Hazard Quotient = Intake/TRV					
Parameter	Definition	Default			
Intake	Intake of COPEC (mg/kg-day)	see Intake			
TRV	Toxicity Reference Value (mg/kg)	see TRV summary page			
Chemical	Average Intake	RME Intake	TRV (deer mouse)	Average EHQ	RME EHQ
2-Methylnaphthalene	6.05E-04	2.96E-03			
4,4'-DDD	2.27E-04	1.48E-03	1.47E-01	1.54E-03	1.00E-02
4,4'-DDE	5.04E-05	1.60E-04	1.47E-01	3.43E-04	1.09E-03
4,4'-DDT	1.10E-04	3.70E-04	1.47E-01	7.46E-04	2.52E-03
Acenaphthene	3.63E-04	9.97E-04			
Acenaphthylene	3.64E-04	9.88E-04			
Anthracene	7.57E-04	1.82E-03			
Antimony	4.36E-02	6.71E-02	1.25E-01	3.48E-01	5.37E-01
Aroclor-1254	5.58E-03	2.02E-02	1.55E-01	3.60E-02	1.30E-01
Arsenic	4.05E-02	5.98E-02	1.85E+00	2.19E-02	3.23E-02
Barium	8.06E+00	1.12E+01	5.18E+01	1.56E-01	2.17E-01
Benzo(a)anthracene	2.12E-03	6.78E-03			
Benzo(a)pyrene	2.40E-03	6.98E-03			
Benzo(b)fluoranthene	3.23E-03	8.69E-03			
Benzo(g,h,i)perylene	2.18E-03	4.72E-03			
Benzo(k)fluoranthene	1.12E-03	2.69E-03			
Boron	9.41E-01	1.45E+00	3.40E+01	2.77E-02	4.25E-02
Cadmium	2.85E-02	6.39E-02	7.70E-01	3.70E-02	8.30E-02
Chromium	7.20E-02	9.45E-02	2.40E+00	3.00E-02	3.94E-02
Chrysene	2.56E-03	7.35E-03			
Cobalt	1.01E-01	1.07E-01			
Copper	1.79E+00	3.46E+00	5.60E+00	3.19E-01	6.17E-01
Dibenz(a,h)anthracene	7.10E-04	1.48E-03			
Dieldrin	2.63E-04	6.13E-04	1.50E-02	1.75E-02	4.09E-02
Endrin Aldehyde	6.26E-05	1.81E-04	9.20E-02	6.81E-04	1.97E-03
Endrin Ketone	4.28E-05	9.56E-05	9.20E-02	4.66E-04	1.04E-03
Fluoranthene	5.15E-03	1.63E-02			
Fluorene	3.83E-04	9.27E-04			
gamma-Chlordane	1.76E-05	4.33E-05	4.60E+00	3.83E-06	9.42E-06
Indeno(1,2,3-cd)pyrene	2.22E-03	4.60E-03			
Lead	6.52E-01	1.27E+00	4.70E+00	1.39E-01	2.70E-01
Lithium	1.96E+00	2.38E+00	1.10E+01	1.78E-01	2.16E-01
Manganese	4.88E+00	5.18E+00	1.06E+02	4.60E-02	4.89E-02
Mercury	4.99E-03	1.37E-02	1.01E+00	4.94E-03	1.35E-02
Molybdenum	4.74E-03	8.57E-03	2.70E-01	1.75E-02	3.17E-02
Naphthalene	2.80E-03	2.40E-02			
Nickel	1.14E-01	1.21E-01	1.70E+00	6.73E-02	7.09E-02
Phenanthrene	3.47E-03	1.17E-02			
Pyrene	3.74E-03	1.12E-02			
Vanadium	7.66E-02	8.07E-02	4.16E+00	1.84E-02	1.94E-02
Zinc	6.32E+00	1.19E+01	7.54E+01	8.39E-02	1.58E-01
LPAH	8.75E-03	4.34E-02	6.56E+01	1.33E-04	6.62E-04
HPAH	2.88E-02	7.94E-02	6.15E-01	4.68E-02	1.29E-01
TOTAL PAHs	3.75E-02	1.23E-01			

TABLE C-11
ECOLOGICAL HAZARD QUOTIENT CALCULATIONS FOR SOIL SOUTH OF MARLIN
COYOTE

Ecological Hazard Quotient = Intake/TRV					
Parameter	Definition	Default			
Intake	Intake of COPEC (mg/kg-day)	see Intake			
TRV	Toxicity Reference Value (mg/kg)	see TRV summary page			
Chemical	Average Intake	RME Intake	TRV Coyote	Average EHQ	RME EHQ
2-Methylnaphthalene	6.27E-05	3.06E-04			
4,4'-DDD	6.59E-06	4.29E-05	1.47E-01	4.48E-05	2.92E-04
4,4'-DDE	1.46E-06	4.65E-06	1.47E-01	9.95E-06	3.16E-05
4,4'-DDT	3.18E-06	1.08E-05	1.47E-01	2.17E-05	7.32E-05
Acenaphthene	3.77E-05	1.03E-04			
Acenaphthylene	3.77E-05	1.02E-04			
Anthracene	7.85E-05	1.89E-04			
Antimony	8.68E-04	1.34E-03	1.25E-01	6.95E-03	1.07E-02
Aroclor-1254	1.76E-04	6.36E-04	1.55E-01	1.14E-03	4.10E-03
Arsenic	2.82E-03	4.16E-03	1.22E+00	2.31E-03	3.41E-03
Barium	2.00E-01	2.79E-01	4.10E-01	4.89E-01	6.80E-01
Benzo(a)anthracene	2.28E-04	7.31E-04			
Benzo(a)pyrene	2.97E-04	8.64E-04			
Benzo(b)fluoranthene	4.00E-04	1.08E-03			
Benzo(g,h,i)perylene	2.26E-04	4.90E-04			
Benzo(k)fluoranthene	1.35E-04	3.25E-04			
Boron	4.10E-01	6.29E-01	2.20E+01	1.86E-02	2.86E-02
Cadmium	3.49E-04	7.82E-04	7.70E-01	4.53E-04	1.02E-03
Chromium	1.14E-02	1.50E-02	2.40E+00	4.76E-03	6.25E-03
Chrysene	2.78E-04	7.99E-04			
Cobalt	2.23E-02	2.37E-02			
Copper	4.83E-01	9.35E-01	5.60E+00	8.63E-02	1.67E-01
Dibenz(a,h)anthracene	9.84E-05	2.06E-04			
Dieldrin	3.88E-05	9.04E-05	1.50E-02	2.58E-03	6.02E-03
Endrin Aldehyde	8.17E-05	2.37E-04	9.20E-02	8.89E-04	2.57E-03
Endrin Ketone	5.59E-05	1.25E-04	9.20E-02	6.08E-04	1.36E-03
Fluoranthene	5.34E-04	1.69E-03			
Fluorene	3.97E-05	9.62E-05			
gamma-Chlordane	2.97E-05	7.32E-05	4.60E+00	6.46E-06	1.59E-05
Indeno(1,2,3-cd)pyrene	3.30E-04	6.82E-04			
Lead	4.52E-02	8.78E-02	4.70E+00	9.61E-03	1.87E-02
Lithium	8.55E-01	1.04E+00	7.50E+00	1.14E-01	1.38E-01
Manganese	1.21E+01	1.29E+01	7.00E+01	1.73E-01	1.84E-01
Mercury	2.22E-05	6.09E-05	1.01E+00	2.20E-05	6.03E-05
Molybdenum	7.52E-04	1.36E-03	1.80E-01	4.18E-03	7.56E-03
Naphthalene	2.90E-04	2.49E-03			
Nickel	9.96E-03	1.05E-02	1.70E+00	5.86E-03	6.18E-03
Phenanthrene	3.60E-04	1.21E-03			
Pyrene	3.88E-04	1.16E-03			
Vanadium	1.22E-02	1.28E-02	4.16E+00	2.92E-03	3.08E-03
Zinc	3.67E-01	6.89E-01	7.54E+01	4.86E-03	9.13E-03
LPAH	9.07E-04	4.50E-03	6.56E+01	1.38E-05	6.86E-05
HPAH	2.99E-03	8.23E-03	6.15E-01	4.86E-03	1.34E-02
TOTAL PAHs	3.89E-03	1.27E-02			

TABLE C-12
ECOLOGICAL HAZARD QUOTIENT CALCULATIONS FOR SOIL SOUTH OF MARLIN
LEAST SHREW

Ecological Hazard Quotient = Intake/TRV					
Parameter	Definition	Default			
Intake	Intake of COPEC (mg/kg-day)	see Intake			
TRV	Toxicity Reference Value (mg/kg)	see TRV summary page			
Chemical	Average Intake	RME Intake	TRV Least Shrew	Average EHQ	RME EHQ
2-Methylnaphthalene	3.44E-03	1.68E-02			
4,4'-DDD	3.16E-03	2.06E-02	1.47E-01	2.15E-02	1.40E-01
4,4'-DDE	7.02E-04	2.23E-03	1.47E-01	4.78E-03	1.52E-02
4,4'-DDT	1.53E-03	5.16E-03	1.47E-01	1.04E-02	3.51E-02
Acenaphthene	2.07E-03	5.67E-03			
Acenaphthylene	2.07E-03	5.62E-03			
Anthracene	4.31E-03	1.04E-02			
Antimony	1.04E-01	1.60E-01	1.25E-01	8.29E-01	1.28E+00
Aroclor-1254	7.65E-02	2.76E-01	1.55E-01	4.94E-01	1.78E+00
Arsenic	2.07E-01	3.05E-01	2.00E+00	1.03E-01	1.53E-01
Barium	2.36E+01	3.29E+01	5.18E+01	4.57E-01	6.35E-01
Benzo(a)anthracene	9.93E-03	3.18E-02			
Benzo(a)pyrene	1.70E-02	4.94E-02			
Benzo(b)fluoranthene	2.28E-02	6.15E-02			
Benzo(g,h,i)perylene	1.24E-02	2.69E-02			
Benzo(k)fluoranthene	8.17E-03	1.97E-02			
Boron	1.77E+00	2.71E+00	3.70E+01	4.77E-02	7.33E-02
Cadmium	1.12E-01	2.50E-01	7.70E-01	1.45E-01	3.25E-01
Chromium	4.13E-01	5.42E-01	2.40E+00	1.72E-01	2.26E-01
Chrysene	1.31E-02	3.76E-02			
Cobalt	1.38E+00	1.47E+00			
Copper	1.29E+00	2.49E+00	5.60E+00	2.30E-01	4.44E-01
Dibenz(a,h)anthracene	5.52E-03	1.15E-02			
Dieldrin	4.08E-03	9.51E-03	1.50E-02	2.72E-01	6.34E-01
Endrin Aldehyde	6.37E-04	1.84E-03	9.20E-02	6.92E-03	2.00E-02
Endrin Ketone	4.36E-04	9.72E-04	9.20E-02	4.74E-03	1.06E-02
Fluoranthene	2.93E-02	9.30E-02			
Fluorene	2.18E-03	5.28E-03			
gamma-Chlordane	2.30E-04	5.67E-04	4.60E+00	5.01E-05	1.23E-04
Indeno(1,2,3-cd)pyrene	1.91E-02	3.94E-02			
Lead	2.03E+00	3.94E+00	4.70E+00	4.32E-01	8.39E-01
Lithium	3.68E+00	4.47E+00	1.20E+01	3.07E-01	3.72E-01
Manganese	1.26E+01	1.34E+01	1.15E+02	1.10E-01	1.17E-01
Mercury	6.90E-02	1.89E-01	1.01E+00	6.83E-02	1.87E-01
Molybdenum	2.72E-02	4.91E-02	2.90E-01	9.36E-02	1.69E-01
Naphthalene	1.59E-02	1.37E-01			
Nickel	4.04E-01	4.26E-01	1.70E+00	2.38E-01	2.50E-01
Phenanthrene	1.98E-02	6.65E-02			
Pyrene	2.13E-02	6.36E-02			
Vanadium	4.39E-01	4.63E-01	4.16E+00	1.06E-01	1.11E-01
Zinc	8.61E+01	1.62E+02	7.54E+01	1.14E+00	2.15E+00
LPAH	4.98E-02	2.47E-01	6.56E+01	7.59E-04	3.77E-03
HPAH	1.64E-01	4.52E-01	6.15E-01	2.66E-01	7.34E-01
TOTAL PAHs	2.14E-01	6.99E-01			

TABLE C-13
ECOLOGICAL HAZARD QUOTIENT CALCULATIONS FOR SOIL SOUTH OF MARLIN
AMERICAN ROBIN

Ecological Hazard Quotient = Intake/TRV					
Parameter	Definition	Default			
Intake	Intake of COPEC (mg/kg-day)	see Intake			
TRV	Toxicity Reference Value (mg/kg)	see TRV summary page			
Chemical	Average Intake	RME Intake	TRV American Robin	Average EHQ	RME EHQ
2-Methylnaphthalene	1.26E-03	5.48E-03	0.00E+00		
4,4'-DDD	1.84E-03	1.19E-02	2.27E-01	8.11E-03	5.26E-02
4,4'-DDE	4.27E-04	1.37E-03	2.27E-01	1.88E-03	6.04E-03
4,4'-DDT	9.26E-04	3.14E-03	2.27E-01	4.08E-03	1.38E-02
Acenaphthene	1.21E-03	3.68E-03	0.00E+00		
Acenaphthylene	9.82E-04	2.76E-03	0.00E+00		
Anthracene	2.22E-03	6.04E-03	0.00E+00		
Antimony	5.81E-02	9.20E-02	0.00E+00		
Aroclor-1254	4.55E-02	1.67E-01	1.80E-01	2.53E-01	9.25E-01
Arsenic	1.12E-01	1.54E-01	2.71E+00	4.12E-02	5.69E-02
Barium	1.42E+01	1.91E+01	1.91E+01	7.44E-01	9.98E-01
Benzo(a)anthracene	5.32E-03	1.82E-02	0.00E+00		
Benzo(a)pyrene	9.57E-03	2.92E-02	0.00E+00		
Benzo(b)fluoranthene	1.25E-02	3.45E-02	0.00E+00		
Benzo(g,h,i)perylene	6.89E-03	1.92E-02	0.00E+00		
Benzo(k)fluoranthene	4.98E-03	1.28E-02	0.00E+00		
Boron	1.04E+00	1.63E+00	1.74E+01	5.99E-02	9.35E-02
Cadmium	6.80E-02	1.60E-01	1.47E+00	4.63E-02	1.09E-01
Chromium	2.00E-01	2.23E-01	2.66E+00	7.51E-02	8.39E-02
Chrysene	6.97E-03	2.16E-02	0.00E+00		
Cobalt	8.27E-01	8.88E-01	0.00E+00		
Copper	6.44E-01	1.01E+00	4.05E+00	1.59E-01	2.50E-01
Dibenz(a,h)anthracene	3.18E-03	7.05E-03	0.00E+00		
Dieldrin	2.52E-03	5.89E-03	7.09E-02	3.56E-02	8.31E-02
Endrin Aldehyde	3.87E-04	1.14E-03	1.00E-02	3.87E-02	1.14E-01
Endrin Ketone	2.65E-04	5.96E-04	1.00E-02	2.65E-02	5.96E-02
Fluoranthene	1.67E-02	5.42E-02	0.00E+00		
Fluorene	1.15E-03	3.12E-03	0.00E+00		
gamma-Chlordane	1.40E-04	3.50E-04	2.14E+00	6.54E-05	1.63E-04
Indeno(1,2,3-cd)pyrene	1.07E-02	2.36E-02	0.00E+00		
Lead	1.09E+00	1.58E+00	1.63E+00	6.69E-01	9.67E-01
Lithium	2.15E+00	2.61E+00	0.00E+00		
Manganese	6.10E+00	6.56E+00	9.98E+02	6.11E-03	6.58E-03
Mercury	4.26E-02	1.16E-01	3.25E+00	1.31E-02	3.58E-02
Molybdenum	1.58E-02	2.09E-02	1.90E+00	8.32E-03	1.10E-02
Naphthalene	4.40E-03	3.78E-02	0.00E+00		
Nickel	1.76E-01	1.88E-01	6.71E+00	2.62E-02	2.80E-02
Phenanthrene	1.10E-02	4.19E-02	0.00E+00		
Pyrene	1.16E-02	3.22E-02	0.00E+00		
Vanadium	1.77E-01	1.90E-01	3.44E-01	5.14E-01	5.52E-01
Zinc	5.25E+01	9.44E+01	6.61E+01	7.95E-01	1.43E+00
LPAH	2.22E-02	1.01E-01	0.00E+00		
HPAH	9.15E-02	2.63E-01	0.00E+00		
TOTAL PAHs	1.14E-01	3.64E-01	0.00E+00		

TABLE C-14
ECOLOGICAL HAZARD QUOTIENT CALCULATIONS FOR SOIL SOUTH OF MARLIN
RED-TAILED HAWK

Ecological Hazard Quotient = Intake/TRV					
Parameter	Definition	Default			
Intake	Intake of COPEC (mg/kg-day)	see Intake			
TRV	Toxicity Reference Value (mg/kg)	see TRV summary page			
Chemical	Average Intake	RME Intake	TRV Red-Tailed Hawk	Average EHQ	RME EHQ
2-Methylnaphthalene	3.99E-05	4.29E-04			
4,4'-DDD	1.11E-06	6.00E-05	2.27E-01	4.89E-06	2.64E-04
4,4'-DDE	2.28E-06	6.50E-06	2.27E-01	1.01E-05	2.86E-05
4,4'-DDT	4.57E-06	1.50E-05	2.27E-01	2.01E-05	6.63E-05
Acenaphthene	7.34E-05	1.45E-04			
Acenaphthylene	4.83E-05	1.43E-04			
Anthracene	1.20E-04	2.64E-04			
Antimony	1.33E-03	1.87E-03			
Aroclor-1254	1.66E-04	8.90E-04	1.80E-01	9.23E-04	4.94E-03
Arsenic	4.42E-03	5.82E-03	4.46E+00	9.91E-04	1.30E-03
Barium	4.08E-01	3.90E-01	3.15E+01	1.29E-02	1.24E-02
Benzo(a)anthracene	4.10E-04	1.02E-03			
Benzo(a)pyrene	5.46E-04	1.21E-03			
Benzo(b)fluoranthene	6.97E-04	1.51E-03			
Benzo(g,h,i)perylene	4.02E-04	6.85E-04			
Benzo(k)fluoranthene	2.87E-04	4.54E-04			
Boron	5.74E-01	8.81E-01	2.86E+01	2.01E-02	3.08E-02
Cadmium	6.28E-04	1.07E-03	1.47E+00	4.27E-04	7.25E-04
Chromium	1.90E-02	2.10E-02	2.66E+00	7.15E-03	7.89E-03
Chrysene	4.87E-04	1.12E-03			
Cobalt	3.07E-02	3.32E-02			
Copper	6.81E-01	1.31E+00	4.05E+00	1.68E-01	3.23E-01
Dibenz(a,h)anthracene	1.87E-04	2.87E-04			
Dieldrin	5.44E-05	1.26E-04	7.09E-02	7.67E-04	1.78E-03
Endrin Aldehyde	1.15E-04	3.31E-04	1.00E-02	1.15E-02	3.31E-02
Endrin Ketone	7.86E-05	1.75E-04	1.00E-02	7.86E-03	1.75E-02
Fluoranthene	9.89E-04	2.37E-03			
Fluorene	6.42E-05	1.34E-04			
gamma-Chlordane	4.17E-05	1.02E-04	2.14E+00	1.95E-05	4.79E-05
Indeno(1,2,3-cd)pyrene	5.80E-04	9.51E-04			
Lead	8.22E-02	1.23E-01	1.63E+00	5.04E-02	7.54E-02
Lithium	1.19E+00	1.45E+00			
Manganese	1.69E+01	1.80E+01	1.64E+03	1.03E-02	1.10E-02
Mercury	2.70E-05	8.52E-05	3.25E+00	8.30E-06	2.62E-05
Molybdenum	1.54E-03	1.90E-03	3.30E+00	4.68E-04	5.77E-04
Naphthalene	4.06E-04	3.49E-03			
Nickel	1.38E-02	1.47E-02	6.71E+00	2.06E-03	2.19E-03
Phenanthrene	6.35E-04	1.70E-03			
Pyrene	6.62E-04	1.62E-03			
Vanadium	1.63E-02	1.79E-02	3.44E-01	4.73E-02	5.22E-02
Zinc	7.11E-01	9.64E-01	6.61E+01	1.07E-02	1.46E-02
LPAH	1.01E-03	6.30E-03			
HPAH	5.35E-03	1.15E-02			
TOTAL PAHs	6.35E-03	1.78E-02			

TABLE C-16
RME CONCENTRATION OF CHEMICAL IN FOOD ITEM (mg/kg)

Compound	RME Csoil (mg/kg)	Soil to Earthworm BCF	Earthworm Concentration	Reference	Soil to Arthropod BCF	Arthropod Concentration	Reference	Soil to Plant BAF	Plant/Fruit/Seed Concentration	Reference	Plant to Wildlife BCF	Plant to Deer Mouse Concentration	Reference	Soil to Wildlife BCF	Soil to Deer Mouse Concentration	Reference	TOTAL DEER MOUSE CONCENTRATION	Plant to Bird BCF	Plant to Bird Concentration	Reference	Soil to Bird BCF	Soil to Bird Concentration	Reference	TOTAL BIRD CONCENTRATION
2-Methylnaphthalene	3.41E-01	7.00E-02	2.39E-02 EPA, 1999*	7.00E-02	2.39E-02 EPA, 1999*	2.02E-02	6.89E-03 EPA, 1999*	5.31E-02	3.66E-04 EPA, 1999*	1.27E-04	4.33E-05 EPA, 1999*	4.09E-04	3.11E-02	2.14E-04 EPA, 1999*	9.98E-04	3.40E-04 EPA, 1999*	5.55E-04							
4,4-DDD	4.98E-02	1.26E+00	6.27E-02 EPA, 1999	1.26E+00	6.27E-02 EPA, 1999	9.37E-03	4.67E-04 EPA, 1999	2.72E-02	1.27E-05 EPA, 1999	6.52E-05	3.25E-06 EPA, 1999	1.59E-05	1.59E-02	7.42E-06 EPA, 1999	5.10E-04	2.54E-05 EPA, 1999	3.28E-05							
4,4-DDE	5.40E-03	1.26E+00	6.80E-03 EPA, 1999	1.26E+00	6.80E-03 EPA, 1999	9.37E-03	5.06E-05 EPA, 1999	2.72E-02	1.38E-06 EPA, 1999	6.52E-05	3.52E-07 EPA, 1999	1.73E-06	1.59E-02	8.05E-07 EPA, 1999	5.10E-04	2.75E-05 EPA, 1999	3.56E-06							
4,4-DDT	1.25E-02	1.26E+00	1.58E-02 EPA, 1999	1.26E+00	1.58E-02 EPA, 1999	9.37E-03	1.17E-04 EPA, 1999	2.72E-02	3.19E-06 EPA, 1999	6.52E-05	8.15E-07 EPA, 1999	4.00E-06	1.59E-02	1.86E-06 EPA, 1999	5.10E-04	6.38E-06 EPA, 1999	8.24E-06							
Acenaphthene	1.15E-01	7.00E-02	8.05E-03 EPA, 1999*	7.00E-02	8.05E-03 EPA, 1999*	2.02E-02	2.32E-03 EPA, 1999*	5.31E-02	1.23E-04 EPA, 1999*	1.27E-04	1.46E-05 EPA, 1999*	1.38E-04	3.11E-02	7.22E-06 EPA, 1999*	9.98E-04	1.15E-04 EPA, 1999*	1.87E-04							
Acenaphthylene	1.14E-01	7.00E-02	7.98E-03 EPA, 1999*	7.00E-02	7.98E-03 EPA, 1999*	2.02E-02	2.30E-03 EPA, 1999*	5.31E-02	1.22E-04 EPA, 1999*	1.27E-04	1.45E-05 EPA, 1999*	1.37E-04	3.11E-02	7.16E-05 EPA, 1999*	9.98E-04	1.14E-04 EPA, 1999*	1.85E-04							
Anthracene	2.10E-01	7.00E-02	1.47E-02 EPA, 1999*	7.00E-02	1.47E-02 EPA, 1999*	2.02E-02	4.24E-03 EPA, 1999*	5.31E-02	2.25E-04 EPA, 1999*	1.27E-04	2.67E-05 EPA, 1999*	2.52E-04	3.11E-02	1.32E-04 EPA, 1999*	9.98E-04	2.10E-04 EPA, 1999*	3.42E-04							
Antimony	1.58E+00	2.20E-01	3.47E-01 Sample, 1991	2.20E-01	3.47E-01 Sample, 1991	2.00E-01	3.15E-01 Bechtel, 1998	5.99E-04	1.89E-04 EPA, 1999	1.44E-06	2.27E-06 Sample, 1998a	1.91E-04	5.99E-04	1.89E-04 EPA, 1999*	1.44E-06	2.27E-06 Sample, 1991	1.91E-04							
Aroclor-1254	7.40E-01	1.13E+00	8.36E-01 EPA, 1999	1.13E+00	8.36E-01 EPA, 1999	1.00E-02	7.40E-03 EPA, 1999	2.43E-02	1.80E-04 EPA, 1999	5.83E-05	4.31E-05 EPA, 1999	2.23E-04	1.42E-02	1.05E-04 EPA, 1999	4.55E-04	3.37E-04 EPA, 1999	4.42E-04							
Arsenic	4.92E+00	1.10E-01	5.41E-01 Sample, 1991	1.10E-01	5.41E-01 Sample, 1991	3.60E-02	1.77E-01 Bechtel, 1998	1.20E-03	2.12E-04 EPA, 1999	2.88E-06	1.42E-05 Sample, 1998a	2.27E-04	1.20E-03	2.12E-04 EPA, 1999	2.88E-06	1.42E-05 Sample, 1991	2.27E-04							
Barium	3.30E+02	2.20E-01	7.27E+01 Sample, 1991	2.20E-01	7.27E+01 Sample, 1991	1.50E-01	4.96E+01 Bechtel, 1998	8.99E-05	4.46E-03 EPA, 1999	2.16E-07	7.14E-05 Sample, 1998a	4.53E-03	8.99E-05	4.46E-03 EPA, 1999	2.16E-07	7.14E-05 Sample, 1991	4.53E-03							
Benz(a)anthracene	8.59E-01	3.00E-02	2.58E-02 EPA, 1999	3.00E-02	2.58E-02 EPA, 1999	2.02E-02	1.74E-02 EPA, 1999	7.19E-03	1.25E-04 EPA, 1999	1.73E-05	1.49E-05 EPA, 1999	1.40E-04	4.20E-03	7.29E-05 EPA, 1999	1.35E-04	1.16E-04 EPA, 1999	1.89E-04							
Benz(a)pyrene	1.01E+00	7.00E-02	7.06E-02 EPA, 1999	7.00E-02	7.06E-02 EPA, 1999	1.01E-02	1.02E-02 EPA, 1999	2.03E-02	2.07E-04 EPA, 1999	4.86E-05	4.90E-05 EPA, 1999	2.56E-04	1.19E-02	1.21E-04 EPA, 1999	3.81E-04	3.84E-04 EPA, 1999	5.05E-04							
Benz(b)fluoranthene	1.26E+00	7.00E-02	8.79E-02 EPA, 1999	7.00E-02	8.79E-02 EPA, 1999	1.01E-02	1.27E-02 EPA, 1999	2.40E-02	3.04E-04 EPA, 1999	5.75E-05	7.22E-05 EPA, 1999	3.77E-04	1.40E-02	1.78E-04 EPA, 1999	4.50E-04	5.65E-04 EPA, 1999	7.43E-04							
Benz(g,h,i)perylene	5.45E-01	7.00E-02	3.82E-02 EPA, 1999*	7.00E-02	3.82E-02 EPA, 1999*	2.02E-02	1.10E-02 EPA, 1999	5.31E-02	5.85E-04 EPA, 1999*	1.27E-04	6.92E-05 EPA, 1999*	6.54E-04	3.11E-02	3.42E-04 EPA, 1999*	9.98E-04	5.44E-04 EPA, 1999*	8.86E-04							
Benz(k)fluoranthene	3.78E-01	8.00E-02	3.02E-02 EPA, 1999	8.00E-02	3.02E-02 EPA, 1999	1.01E-02	3.82E-03 EPA, 1999	2.39E-02	9.12E-05 EPA, 1999	5.75E-05	2.17E-05 EPA, 1999	1.13E-04	1.39E-02	5.31E-05 EPA, 1999	4.48E-04	1.69E-04 EPA, 1999	2.22E-04							
Boron	7.39E+00	1.00E+00	7.39E+00 **	1.00E+00	7.39E+00 **	1.00E+00	7.39E+00 **	1.00E+00	7.39E+00 **	1.00E+00	7.39E+00 **	1.48E+01	1.00E+00	7.39E+00 **	1.00E+00	7.39E+00 **	1.48E+01							
Cadmium	7.51E-01	9.60E-01	7.21E-01 Sample, 1991	9.60E-01	7.21E-01 Sample, 1991	3.64E-01	2.73E-01 Bechtel, 1998	7.19E-05	1.97E-05 EPA, 1999	1.73E-07	1.30E-07 Sample, 1998a	1.98E-05	4.71E-02	1.29E-02 EPA, 1999	1.51E-03	1.13E-03 EPA, 1999	1.40E-02							
Chromium	1.78E+01	1.00E-02	1.78E-01 Sample, 1991	1.00E-02	1.78E-01 Sample, 1991	7.50E-03	1.33E-01 Bechtel, 1998	3.30E-03	4.39E-04 EPA, 1999	7.91E-06	1.40E-04 Sample, 1998a	5.80E-04	3.30E-03	4.39E-04 EPA, 1999	7.91E-06	1.40E-04 Sample, 1991	5.80E-04							
Chrysene	9.38E-01	4.00E-02	3.75E-02 EPA, 1999	4.00E-02	3.75E-02 EPA, 1999	1.00E-02	1.75E-02 EPA, 1999	8.27E-03	1.45E-04 EPA, 1999	1.99E-05	1.87E-05 EPA, 1999	1.64E-04	4.84E-03	8.49E-05 EPA, 1999	1.55E-04	1.45E-04 EPA, 1999	2.30E-04							
Cobalt	4.41E+00	1.00E+00	4.41E+00 **	1.00E+00	4.41E+00 **	7.45E-03	3.28E-02 Bechtel, 1998	1.00E+00	3.28E-02 **	1.00E+00	4.41E-01 Sample, 1998a	4.74E-01	1.00E+00	3.28E-02 **	1.00E+00	4.41E-01 Sample, 1991	4.74E-01							
Copper	4.69E+01	4.00E-02	1.88E+00 EPA, 1999	4.00E-02	1.88E+00 EPA, 1999	4.00E-01	1.88E+01 EPA, 1999	1.00E+00	1.88E+01 **	5.25E-02	2.46E+00 Sample, 1998a	2.12E+01	1.00E+00	1.88E+01 **	5.25E-02	2.46E+00 Sample, 1991	2.12E+01							
Dibenz(a,h)anthracene	2.36E-01	7.00E-02	1.65E-02 EPA, 1999	7.00E-02	1.65E-02 EPA, 1999	6.40E-03	1.51E-03 EPA, 1999	5.31E-02	8.02E-05 EPA, 1999	1.27E-04	3.00E-05 EPA, 1999	1.1												